

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
НАЦІОНАЛЬНИЙ ТЕХНІЧНИЙ УНІВЕРСИТЕТ
«ХАРКІВСЬКИЙ ПОЛІТЕХНІЧНИЙ ІНСТИТУТ»

Т. М. Нетецька

**ICT VOCABULARY AND GRAMMAR IN USE:
SELF-STUDY PRACTICE BOOK**

**ЛЕКСИКО-ГРАМАТИЧНИЙ ПРАКТИКУМ
З АНГЛІЙСЬКОЇ МОВИ
для самостійної роботи
студентів 1 курсу
комп'ютерно-інформаційних спеціальностей**

Навчальний посібник

Затверджено
редакційно-видавничою
радою університету,
протокол № 3 від 22.12.16.

Харків
НТУ «ХПІ»
2018

УДК 811.111(075)

Н 57

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У навчальному посібнику надані тексти різноманітних функціональних стилів, основні граматичні правила, тести та довідник комп'ютерних термінів та аббревіатур. Наведено завдання для оволодіння основними видами читання, граматичні коментарі, а також вправи для розвитку навичок усного та письмового мовлення.

Посібник призначений для організації самостійної роботи студентів комп'ютерно - інформаційних спеціальностей.

Нетецька Т. М.

Н 57 Лексико-граматичний практикум з англійської мови для самостійної роботи студентів 1 курсу комп'ютерно-інформаційних спеціальностей : навч. посібник / Т. М. Нетецька. – Харків : НТУ «ХПІ», 2018. – 160 с.

Netetska T.

Н 57 ICT vocabulary and grammar in use: self-study practice book : textbook / T. Netetska. – Kharkiv : NTU KhPI, 2018. – 160 p.

ISBN

This course book presents various functional style texts, the basic grammar rules, tests and the glossary. The tasks to master basic reading strategies, brief grammar comments, as well as exercises to develop skills in speaking and writing are given.

The course book is intended for organizing ICT students' independent work.

Бібліогр.: 9

ISBN

УДК 811.111(075)

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ПЕРЕДМОВА

Даний навчальний посібник орієнтований на вдосконалення навичок використання сучасних методів навчання.

Структура посібника складається з 4 розділів: “Reading”, “Writing” “Tests” та “Appendix”, що містять в собі як дані про комп’ютерні технології, так і практичні завдання, побудовані на реальних англомовних зразках.

Посібник являє собою логічно структурований та змістовно наповнений підручник, який можна застосовувати для самостійного використання студентами.

Автор сподівається на те, що це видання допоможе студентам краще засвоїти курс «Англійської мови», оволодіти фаховою термінологією, опанувати сучасні комп’ютерні технології та виробити практичні навички взаємодії з суспільством.

Виражаю подяку усім тим, хто допомагав у тому, щоб цей посібник побачив світ.

READING

COMPUTER BASICS

Read the text.

The word “computer” has been part of the English language since 1646, but if you look in a dictionary printed before 1940, you might be surprised to find a computer defined as a person who performs calculations! Prior to 1940, machines designed to perform calculations were referred to as calculators and tabulators, not computers. The modern definition and use of the term “computer” emerged in the 1940s, when the first electronic computing devices were developed.

Most people can formulate a mental picture of a computer, but computers do so many things and come in such a variety of shapes and sizes that it might seem difficult to distill their common characteristics into an all-purpose definition. At its core, a computer is a device that accepts input, processes data, stores data, and produces output, all according to a series of stored instructions.

Computer input is whatever is typed, submitted, or transmitted to a computer system. Input can be supplied by a person, the environment, or another computer. Examples of the kinds of input that a computer can accept include words and symbols in a document, numbers for a calculation, pictures, temperatures from a thermostat, audio signals from a microphone, and instructions from a computer program. An input device, such as a keyboard or mouse, gathers input and transforms it into a series of electronic signals for the computer to store and manipulate.

In the context of computing data refers to the symbols that represent facts, objects, and ideas. Computers manipulate data in many ways, and this manipulation is called processing. The series of instructions that tell a computer how to carry out processing tasks is referred to as a computer program, or simply a “program”. These programs form the software that sets up a computer to do a specific task. Some of the ways that a computer can process data include

performing calculations, sorting lists of words or numbers, modifying documents and pictures, keeping track of your score in a fact-action game, and drawing graphs. In a computer, most processing takes place in a component called the central processing unit (CPU), which is sometimes described as the computer's "brain".

A computer stores data so that it will be available for processing. Most computers have more than one place to put data, depending on how the data is being used. Memory is an area of a computer that temporarily holds data waiting to be processed, stored, or output. Storage is the area where data can be left on a permanent basis when it is not immediately needed for processing. Output is the result produced by a computer. Some examples of computer output include reports, documents, music, graphs, and pictures. An output device displays, prints, or transmits the results of processing.

Take a moment to think about the way you use a simple handheld calculator to balance your checkbook each month. You're forced to do the calculations in stages. Although you can store data from one stage and use it in the next stage, you cannot store the sequence of formulas – the program – required to balance your checkbook. Every month, therefore, you have to perform a similar set of calculations. The process would be much simpler if your calculator remembered the sequence of calculations and just asked you for this month's checkbook entries.

Early "computer" were really no more than calculating devices, designed to carry out a specific mathematical task. To use one of these devices for a different task, it was necessary to rewire its circuits – a job best left to an engineer. In a modern computer, the idea of a stored program means that a series of instructions for a computing task can be loaded into a computer's memory. These instructions can easily be replaced by a different set of instructions when it is time for the computer to perform another task.

The stored program concept allows you to use your computer for one task, such as word processing, and then easily switch to a different type of computing task, such as editing a photo or sending an e-mail message. It is the single most important characteristic that distinguishes a computer from other simpler and

less versatile devices, such as calculators and pocket-sized electronic dictionaries.

Mark the following statements as True or False.

1. A computer can be defined by its ability to perform different mathematical and logical operations according to a set of instructions.
2. Computers had already been used before WWII.
3. There is no any significant difference between memory and storage.
4. Computer programs and software mean the same.
5. CPU is a part of a computer that controls all other parts of the system.
6. Computers and calculators are very similar devices which are based on the stored program concept.

Match the words with their synonyms.

supply	unit
distinguish	appear
purpose	but
device	open
emerge	goal
available	differentiate
although	provide

Which word does not belong to the group?

a) input	carry out	output	process
b) hold	store	keep	perform
c) edit	data	transmit	set up
d) software	storage	supply	memory
e) accept	refer	input	load
f) unit	device	software	equipment

PERSONAL COMPUTER SYSTEMS

Read the text.

The term “computer system” usually refers to a computer and all the input, output, and storage devices that are connected to it. A personal computer system usually includes the following equipment:

- **System unit.** The system unit is the case that holds the main circuit boards, microprocessor, power supply, and storage devices. The system unit the notebook computer holds a built-in keyboard and speakers, too.

- **Display device.** Most desktop computers use a separate monitor as a display device, whereas notebook computers use a flat panel LCD screen (liquid crystal display screen) attached to the system unit.

- **Keyboard.** Most computers are equipped with a keyboard as the primary input device.

- **Mouse.** A mouse is an input device designed to manipulate on-screen graphical objects and controls.

- **Hard disk drive.** A hard disk drive can store billions of characters of data. It is usually mounted inside the computer’s system unit. A small external light indicates when the drive reading or writing data.

- **CD and DVD drives.** A CD drive is a storage device that uses laser technology to work with data on computer or audio CDs. A DVD drive can work with data on computer CDs, audio CDs, computer DVDs, or DVD movie disks. Some CD and DVD drives are classified as “read only” devices that cannot be used to write data onto disks. They are typically used to access data from commercial software, music, and movie CDs or DVDs. “Writable” CD and DVD drives, however, can be used to store and access data.

- **Floppy disk drive.** A floppy disk drive is a storage device that reads and writes data on floppy disks.

- **Sound card and speakers.** Desktop computers have a rudimentary built-in speaker that’s mostly limited to playing beeps. A small circuit board, called a sound card, is required for high-quality music, narration, and sound effects. A

desktop computer's sound card sends signals to external speakers. A notebook's sound card sends signals to speakers that are built into the notebook system unit.

- Modem and network cards. Many personal computer systems include a built-in modem that can be used to establish an Internet connection using a standard telephone line. A network card is used to connect a computer to a network or cable Internet connection.

- Printer. A computer printer is an output device that produces computer-generated text or graphical images on paper.

The term peripheral device designates equipment that might be added to a computer system to enhance its functionality. Popular peripheral devices include printers, digital cameras, scanners, joysticks, and graphics tablets.

The word "peripheral" is a relatively old part of computer jargon that dates back to the days of mainframes when the CPU was housed in a giant box and all input, output, and storage devices were housed separately. Technically, a peripheral is any device that is not housed within the CPU.

Although a hard disk drive seems to be an integral part of a computer, by the strictest technical definition, a hard disk drive would be classified as a peripheral device. The same goes for other storage devices and the keyboard, monitor, LCD screen, sound card, speakers, and modem. In the world of personal computers, however, the use of the term "peripheral" varies and is often used to refer to any components that are not housed inside the system unit.

Indicate the paragraph where the following ideas are found in the text.

When the drive is being used a small light indicator is on.

Sound characteristics of different computers vary.

This device is most suitable for controlling the position of the cursor on screen.

It's a device to use Internet via a phone line.

This system is represented by different interlinked input, output and storage devices.

There is a storage device that uses laser technology.

Fill in the gaps in the text.

Computers are grouped into categories, such as ___ computers, handhelds, mainframes, supercomputers, servers, workstations, and videogame _____. A ___ computer is a type of microcomputer designed to ___ the needs of an individual while ___ are very expensive and used for very specific and complex _____.

DIGITAL RIGHTS MANAGEMENT

Read the article and express you opinion on the problem.

Suppose you purchase a music CD of your favorite recording group. Now you want to transfer the file to your computer, rip the best tracks, and transfer them to your portable audio player. But wait! That CD is copy protected and your computer CD drive won't read it. You purchased the disk. Can't you listen to the music on any device you choose? The answer is "yes" and "no". Yes, copyright law gives you the right to make copies for your personal use and transfer works into a format that works on your equipment. However, the growing pervasiveness of digital rights management may curtail your ability to exercise these rights.

It is easy to copy digital material. Before the dawn of the digital age, copies produced by analog equipment, such as photocopiers and audio tape dubbing machines, were of considerably poorer quality than the originals. Copies of digital materials, however, are indistinguishable from the originals, and that factor has encouraged an alarming increase in software, music, and movie piracy.

The battle against piracy took shape as a concept called digital rights management (DRM), vigorously supported by Microsoft and backed by a host of industry leaders.

Today, digital rights management encompasses a variety of technologies implemented by copyright holders, such as record companies and software publishers, which restrict the usage of digital material. DRM systems address piracy by using a variety of technologies for manipulating data, media, devices, and transactions.

Software copy protection techniques include reading data written to places on a disk or CD-ROM that the drive cannot normally access, using hardware that must be plugged into the computer when the software is run, requiring a serial number during the installation process, and using Internet product activation that checks the validity of an installation. Most software copy protection schemes have proved to be costly for publishers or inconvenient for consumers.

Many consumers are not aware that they pay a surcharge for every blank audio tape or CD they purchase. Collected revenues from this surcharge go to music publishers to compensate recording artists for the fact that many people duplicate works without authorization.

Most of today's music download sites encrypt music files and embed codes that limit the number of times they can be copied and the devices on which they can be played. Various formats used by different sites are not compatible with each other and require different players. Music from several different download sites cannot be compiled into a single playlist. It is becoming more common for music CDs to use play-protection technology designed to make the CD unusable in devices, such as computer CD-R drives, that can also be conveniently used for duplicating CDs. Consumers who purchase these protected CDs find that they cannot be copied to a computer hard disk, then ripped to produce an MP3 file for a portable audio player.

Commercial movie DVDs use CSS (Content-Scrambling System) encryption to make DVDs playable only on authorized DVD players equipped with decryption key circuitry. Movies purchased in the United States and Canada cannot be played on devices manufactured for the European or Asian markets.

Despite DRM technologies and the inconveniences imposed on consumers, digital piracy remains rampant. According to an article about digital

rights management posted on Wikipedia, “To date, all DRM systems have failed to meet the challenge of protecting the rights of the rights holder while also allowing the use of the rights of the purchaser. None have succeeded in preventing criminal copyright infringement by organized, unlicensed, commercial pirates.”

Current DRM technologies do not seem able to distinguish between pirates and legitimate consumers. As a result, DRM technologies essentially pose restrictions on consumers that go beyond the intended limitations of copyright law.

The current status of DRM seems to conflict with the original intent of copyright law to allow consumers to manipulate and copy works for their own use. Can technology eventually offer a solution that prevents piracy, but allows individuals to exercise their rights to fair use of copyrighted materials?

What do you think?

1. Have you had trouble using software or music CDs because of copy protection?

2. In your opinion, do sites like the iTunes Music Store provide consumers with enough flexibility for copying files and creating playlists?

3. Are DRM technologies justified because of the high rate of piracy?

Some useful verbs

1. To turn on the computer, _____ the "Start" button.

a) touch b) press c) switch

2. The printer has _____ of ink.

a) finished b) ended c) run out

3. Unfortunately, my scanner isn't _____ at the moment.

a) working b) going c) doing

4. Please _____ the CD ROM.

a) insert b) introduce c) inject

5. The projector isn't working because it isn't _____.
- a) plugged b) plugged in c) plugged into
6. The batteries in my digital camera are nearly dead. They need _____.
- a) to change b) exchanging c) changing
7. I have to _____ a computer screen for eight hours a day.
- a) see b) look at c) watch
8. Switch off your computer, and _____ it from the wall socket.
- a) de-plug b) unplug c) non-plug
9. I turned off the photocopier and _____ the plug.
- a) . pulled out b) extracted c) took away
10. _____ any key to continue.
- a) Klick b) Smash c) Hit
11. TV and computer screens are usually measured in _____.
- a) feet b) miles c) inches
12. Before you start work, _____ the height of your chair
- a) adjust b) change c) rearrange
13. To get sound from your computer, plug in a pair of _____.
- a) loudhailers b) loudspeakers c) loud voices
14. The computer is connected to the telephone line via a _____.
- a) module b) modem c) mod
15. You can increase the functions or performance of a computer with an _____.
- a) extension card b) exploding card c) expansion card
16. Mobile phones and PDAs can communicate with computers via _____.
- a) Bluebeard ® b) Blueberry ® c) Bluetooth ®
17. There's a spare _____ in the workstation...
- a) electric hole b) power point c) electrical opening
18. ...so you can plug in your mobile phone _____.
- a) charger b) power c) electrification
19. SD cards can be read in a computer's _____.
- a) storage reader b) memory reader c) card reader

Some useful adjectives

1. Oh dear. I pressed the _____ button.
a) incorrect b) wrong c) false
2. I can't use my mobile phone. The battery's _____.
a) over b) flat c) exhausted
3. The battery isn't completely flat, but its very _____.
a) down b) short c) low
4. My video camera is very _____.
a) easy to use b) uncomplicated c) obvious
5. My new computer has a very _____ processor.
a) quick b) high speed c) fast
6. The X19 notebook computer features a very _____ design.
a) compact b) little c) small
7. Keeping files on paper is _____ solution.
a) an old-tech b) a past-tech c) a low-tech
8. Keeping files on a computer database is a _____ solution.
a) new-tech b) now-tech c) high-tech
9. My new PDA is the _____ model.
a) latest b) newest c) most modern
10. In our office, we've set up a _____ network.
a) wire-free b) no wires c) wireless
11. A call from New York to Tokyo is _____ distance.
a) far b) long c) faraway
12. I don't think this printer is _____ with my computer.
a) compatible b) connectable c) suitable
13. My laptop is only 3 centimeters _____.
a) thick b) tall c) wide
14. The screen on my laptop isn't very _____.
a) light b) white c) bright
15. In three or four years, my new computer will probably be _____.
a) old fashioned b) behind the times c) obsolete

16. When you connect this to your computer, it will work immediately.
It's _____.

- a) plug and go b) plug and play c) plug and use

Choose the best words to complete the sentences

contract	installed	networks	operators
pay-as-you-go	SIM card	roaming	tariffs
top up	users		

In Britain there are several mobile phone 1 _____ including Vodaphone, O2, T-mobile and

Orange. There are also 2 _____ like Virgin Mobile who use the network of another company.

When you buy a cell phone, you have a choice of 3 _____. The most popular is

" 4 _____", with customers paying for their calls in advance. They can 5 _____ their

accounts in shops, over the internet, and at cash machines. Heavy 6 _____ may prefer a

7 _____. They pay a fixed amount every month, but the calls are much cheaper than they are

for pay-as-you-go customers.

Mobile phones usually come with a 8 _____ already 9 _____.

If you take the phone abroad, you may be able to use it on a local network. This is called 10 _____". It can

be expensive, and it may be cheaper to buy a foreign SIM card.

Choose the best word.

1. After 6pm, calls cost 20p _____ minute

a) for one b) per c) each

2. You can't use a mobile in a cave because there's no _____.

a) network b) connection c) power

3. I need to charge up my mobile phone battery. Have you seen my ____?

a) . charger b) recharger c) charging machine

4. When you send a text message, the _____ function can help you write it more quickly.

a) predicting text b) predictive text c) text predictor

5. In the car, it's safer to use a _____ phone.

a) handless b) no hands c) hands-free

6. If you don't want to dial a number by mistake, turn on the _____.

a) keypad locker b) keypad lock c) locker of keypad

7. Which network has the lowest _____?

a) call charges b) call costs c) call expenses

8. My pay-as-you-go account _____ is about £7.

a) balance b) level c) amount

9. My average call _____ is about two minutes.

a) time b) length c) duration

10. We're a long way from the nearest _____ ...

a) broadcaster b) antenna c) transmitter

11. ...so the _____ is very weak.

a) sign b) signal c) transmission

Which is not possible?

12. I'll call her on my...

a) mobile phone b) cell phone c) moving phone d) cellular phone

13. A mobile phone can't work without a...

a) SIM card b) sim card c) sim chip d) similar card

14. Don't forget to send me...

a) a text message b) a text c) an SMS d) a phone message

15. When I arrive, I'll...

a) text you b) textiles you c) send you d) send you a text an SMS

APPLICATION OF PERSONAL COMPUTERS

Read the text.

Personal computers have a lot of applications, however, there are some major categories of applications: home and hobby, word processing, professional, educational, small business and engineering and scientific. Home and hobby. Personal computers enjoy great popularity among experimenters and hobbyists. They are an exciting hobby. All hobbyists need not be engineers or programmers. There are many games that use the full capabilities of a computer to provide many hours of exciting leisure-time adventure. The list of other home and hobby applications of PCs is almost endless, including: checking account management, budgeting, personal finance, planning, investment analyses, telephone answering and dialing, home security, home environment and climate control, appliance control, calendar management, maintenance of address and mailing lists and what not. Word processing. At home or at work, applications software, called a word processing program, enables you to correct or modify any document in any manner you wish before printing it. Using the CRT monitor as a display screen, you are able to view what you have typed to correct mistakes in spelling or grammar, add or delete sentences, move paragraphs around, and replace words. The letter or document can be stored on a diskette for future use. Professional. The category of professional includes persons making extensive use of word processing, whose occupations are particularly suited to the desk-top use of PCs. Examples of other occupations are accountants, financial advisors, stock brokers, tax consultants, lawyers, architects, engineers, educators and all levels of managers. Applications programs that are popular with persons in these occupations include accounting, income tax preparation, statistical analysis, graphics, stock market forecasting and computer modeling. The electronic worksheet is, by far, the computer modeling program most widely used by professionals. It can be used for scheduling, planning, and the examination of "what if" situations. Educational. Personal computers are having and will continue to have a profound influence upon the classroom, affecting both the learner and the teacher. Microcomputers are making their way into classrooms to an ever-increasing extent, giving

impetus to the design of programmed learning materials that can meet the demands of student and teacher.

Answer the following questions.

1. What are the main spheres of PC application? 2. What is "a word processing program"? 3. Can you correct mistakes while typing any material and how? 4. What other changes in the typed text can you make using a display? 5. Which professions are in great need of computers? 6. How can computers be used in education?

THE USE OF COMPUTERS

Read the text.

Just as television has extended human sight across the barriers of time and distance, so the computers extend the power of the human mind across the existing barriers. They save a lot of time. They seldom make mistakes. It's much faster and easier to surf the Internet than to go to the library.

In the last 10 years or so, most large businesses have become completely depended on computers for storing and looking an information, for writing and calculating financial and mathematical information.

Computers within a single office or building may be connected, and they there fore form a network. Users of computers on a network can send messages to each other utilizing the same collections of data or information. In many offices and organizations computer message have replaced messages written on paper, and they are now called e-mail or electronic mail.

E-mail is a great invention, too. It's faster than sending a letter and cheaper than sending a telegram.

E-mail saves paper and the work of moving paper from one place to another. Workers can send and receive e-mail without leaving their desks and their desktop computers. But computers have some disadvantages. Computers can get viruses. Sometimes the wrong people can make use of the information

available in the wrong way. Computers become out of date very quickly, they need to be replaced.

Give the English equivalents for:

Розширювати здатності людського мозку, існуючі бар'єри, економити час, робити помилки, повністю залежить від комп'ютера, переглядати інформацію, посилати повідомлення, замінювати повідомлення, винахід, не залишаючи свого місця, надсилати і отримувати електронну пошту, використовувати інформацію неправильно, застарівати, потребувати заміни.

Answer the questions:

1. What advantages of computer do you know?
2. Why have most large businesses become completely depended on computers?
3. How do we use the e-mail?
4. What disadvantages of computers do you know?

COMPUTERS IN MEDICINE

Computers are one of great importance in modern hospital. The chief use of computers is the storing and sorting the medical knowledge which has been enquired in the last 50 years. No doctor can possible keep up with all discoveries. The only solution of the problem is store medical knowledge in a computer. Today there are medical computer centers where all existing knowledge of symptoms of various diseases and of their treatment is stored. Doctors feed data on symptoms in the computer and get the necessary information on correct diagnostics and treatment.

Give the English equivalents for:

у сучасній лікарні, накопичення медичних знань, зберігати відкриття, рішення проблеми, існуючі знання про симптоми різних хвороб, лікування хвороб, подавати дані про симптоми в комп'ютер, отримати необхідну інформацію, правильна діагностика і лікування

Answer the questions:

1. What is the chief use of computers in modern hospital?
2. What is the only solution of the medical problem?
3. What are there in the medical computer centers today?
4. Why do doctors feed data on symptoms in the computer?

E-MAIL

Read the text.

Perhaps the first step that many people have tried when using the Internet is E-mail. In theory, E-mail is an electronic message from a sender to a recipient, (or multiple recipients.) Some people say that an email message is the Internet equivalent of sending a fax. Compared to postal E-mail, (often called 'snail-mail' by Internet users), E-mail is probably much faster. But there are several problems with E-mail. In theory, messages can be sent back and forth immediately (usually within a few seconds), regardless of whether the message is sent to the next building or to the next continent. Nevertheless E-mail messages may sit in the recipient's electronic mailbox for days or weeks until the user checks them. To be able to send an E-mail message, you must know the E-mail address of the person you want to send the message to. A person's E-mail address is constructed from the username they use to login to their provider and the computer's Internet host name. By combining the two with an @ sign between, then you have created that user's E-mail address.

THE LANGUAGE OF E-MAIL

Read the text.

E-mail is the simplest and most immediate function of the Internet for many people. Run through a list of questions that new e-mail users ask most and some snappy answers to them.

What is electronic mail? Electronic mail, or e-mail as it's normally shortened to, is just a message that is composed, sent and read electronically (hence the name). With regular mail you write out your message (letter, postcard, whatever) and drop it off at the post office. The postal service then delivers the message and the recipient reads it. E-mail operates basically the same-way except that everything happens electronically. You compose your message using e-mail software, send it over the lines that connect the Internet's networks and the recipient uses an e-mail program to read the message.

How does e-mail know how to get where it's going? Everybody who's connected to the Internet is assigned a unique e-mail address. In a way, this address is a lot like the address of your house or apartment because it tells everyone else your exact location on the Net. So anyone who wants to send you an e-mail message just tells the e-mail program the appropriate address and runs the Send command. The Internet takes over from there and makes sure the missive arrives safely.

What's this netiquette stuff I keep hearing about? The Net is a huge, unwieldy mass with no "powers-that-be" that can dictate content or standards. This is, for the most part, a good thing because it means there's no censorship and no one can wield authority arbitrarily. To prevent this organized chaos from descending into mere anarchy, however, a set of guidelines has been put together over the years. These guidelines are known collectively as netiquette (network etiquette) and they offer suggestions on the correct way to interact with the Internet's denizens. To give you a taste of netiquette, here are some highlights to consider.

- Keep your message brief and to the point and make sure you clear up any spelling slips or grammatical gaffes before shipping it out.

- Make sure the Subject lines of your message are detailed enough so they explain what your message is all about.
- Don't SHOUT by writing your missives entirely in uppercase letters.
- Don't bother other people by sending them test messages. If you must test a program, send a message to yourself.

What's a flame? The vast majority of e-mail correspondence is civil and courteous, but with millions of participants all over the world, it's inevitable that some folks will rub each other the wrong way. When this happens, the combatants may exchange emotionally charged, caustic, often obscene messages called flames. When enough of these messages exchange hands, an out-and-out flame war develops. These usually burn themselves out after a while, and then the participants can get back to more interesting things.

Is e-mail secure? In a word, no. The Net's open architecture allows programmers to write interesting and useful new Internet services, but it also allows unscrupulous snoops to lurk where they don't belong. In particular, the e-mail system has two problems: it's not that hard for someone else to read your e-mail, and it's fairly easy to forge an e-mail address. If security is a must for you, then you'll want to create an industrial strength password for your home directory, use encryption for your most sensitive messages, and use an anonymous remailer when you want to send something incognito.

I. Answer the questions:

1. What major problems are there with the e-mail?
2. Would it be a problem for you?
3. What do you think is the reason for the various bits of netiquette which are mentioned?
4. For which of the following types of writing is it necessary to be brief?
Instructions, love letters, news reports, business proposals, faxes, adverts, insurance claims, curriculum vitae, short stories, scientific reports, e-mail, poems.

Email comprehension 1

Hi Tony

Thanks for sending through that a/w so quickly. Just one problem – I couldn't open the attachment. I'm not sure why. My inbox is virtually empty, so there's plenty of room, and the attachment limit is 20MB, so there's no problem there. Perhaps there was a glitch somewhere.

Anyway, rather than trying to figure out what went wrong, could you just send it again?

Did we discuss file format? I don't know much about TIFFs, JPEGs etc, but I meant to tell you that if you have any queries on this, you could get in touch with Steve, our designer. His email address is steve@stevegreendesign.co.uk.

One other thing. When you resend me the a/w, could you cc it to Angela? I've asked her to have a quick look at it before we put it in the brochure.

I'm looking forward very much to seeing those pics – fingers crossed that they'll come through OK this time. However, if I still can't download them, I'll ask you to put them on a disk and mail them.

All the best

Jenny

Are these statements true or false?

1. Jenny didn't receive the a/w because her inbox is too small.
2. The attached files came to less than 20MB in total.
3. Jenny has resolved a technical problem, and the attachment will come through without any problems next time.
4. Tony will have to resend the a/w.

5. Jenny is a graphic design expert
6. Tony is also going to put the files onto a disk and mail them.
7. Angela has already seen the a/w.
8. The style is too informal – business emails should always be more formal than this.

Email comprehension 2

Dear Jenny

As requested, I'm attaching the a/w files again.

The technical problems you've been experiencing may be due to your email provider. I have to say, I've never heard of Whoopydudu.com. You might be better off switching to one of the big names, such as Gmail or Yahoo.

Regarding file formats, TIFFs should be OK. If necessary, your designer will be able to reformat them very easily, but in my experience most designers have no problem working with TIFFs.

As the file sizes are quite large, and I understand that Angela only has a dial-up connection, I've sent her low-res versions to look at. I hope that will be OK. They should be clear enough.

I'm just about to go on holiday, so if you need me to send these files on disk, please let me know by Friday afternoon. I probably won't get the opportunity to check my email while I'm away, but if anything arises that won't keep, my assistant Trevor may be able to deal with it.

Best regards

Tony

Are these statements true or false?

1. Tony thinks Jenny should change her email provider.
2. The designer will need to reformat the files.
3. Angela doesn't have broadband.
4. Tony is sending resized versions of the a/w files to Angela.

5. These versions will look the same as the original versions.
6. Tony is going on holiday on Friday morning.
7. Trevor may be able to help with any problems that come up while Tony is away.
8. The style is neutral – neither formal nor informal.

THE INTERNET

Read the text.

The Internet, a global computer network which embraces millions of users all over the world, began in the United States in 1969 as a military experiment. It was designed to survive a nuclear war. Information sent over the Internet takes the shortest path available from one computer to another. Because of this, any two computers on the Internet will be able to stay in touch with each other as long as there is a single route between them.

This technology is called packet switching. Owing to this technology, if some computers on the network are knocked out (by a nuclear explosion, for example), information will just route around them. One such packet-switching network already survived a war. It was the Iraq computer network, which was not knocked out during the Gulf War.

Most Internet host computers (more than 50%) are in the United States, while the rest are located in more than 100 other countries. Although the number of host computers can be counted fairly accurately, nobody knows exactly how many people use the Internet. There are millions and their number is growing by thousands each month world-wide.

The most popular Internet service is e-mail. Most of people, who have access to the Internet, use the networks only for sending and receiving e-mail messages. However, other popular services are available on the Internet: reading news, using the World Wide Web, telnet etc.

Give the English equivalents for:

Глобальна комп'ютерна мережа, ядерна війна, найкоротший шлях, пакетна комунікація, вимикати, найпопулярніша служба Інтернету, мати доступ до Інтернету, посилати електронну пошту, рішуче збільшення, передавати повідомлення, постійно перехоплювати, зашифровані програми, вести операції по Інтернету.

Answer the questions:

- 1.What is the Internet?
- 2.Where did the Internet begin?
- 3.Why was the Internet designed?
- 4.What is the most popular Internet service?
- 5.How do people use the Internet?
- 6.How can the commercial users communicate over the Internet?

THE INTERNET AS A SOURCE OF INFORMATION

Read the text.

Computers play a very important part in our life. They help people in their work and studies. They save us a lot of time. While at school I often made use of the Internet to collect information for my test papers and compositions. Computers give access to a lot of information. It is possible to find data and descriptions, chapters from necessary books... to make a long story short, everything you need. The Internet, a global computer network, which embraces millions of users all over the world, began in the United States in 1969 as a military experiment. It was designed to survive in a nuclear war. Information sent over the Internet takes the shortest path available from one computer to another. Most of the Internet host computers (more than 50%) are in the United States, while the rest are located in more than 100 other countries. Although the number of host computers can be counted fairly accurately, nobody knows

exactly how many people use the Internet. There are millions and their number is growing by thousands each month worldwide. Users of computers on a network can send messages to each other, utilizing the same collections of data or information. In many offices and organizations computer messages have replaced messages written on paper, and they are now called e-mail or electronic mail. E-mail is not only fast and easy (if you understand how to use the computer), but it also saves paper and the work of moving paper from one place to another. Workers can send and receive e-mail without leaving their desks and their desktop computers. The Internet may provide businessmen with a reliable alternative to the expensive and unreliable telecommunication systems of their communities. Commercial users can communicate over the Internet with the rest of the world and can do it very cheaply. But saving money is only the first step. If people see that they can make money from the Internet, they increase the commercial use of this network. For example, some American banks and companies conduct transactions over the Internet. So, you see that the Internet is an inseparable part of our life.

Give the English equivalents for:

Економити час, збирати інформацію, знайти будь-яку інформацію, глобальна комп'ютерна мережа, надіслати інформацію по Інтернету, посилати повідомлення один одного, спілкуватися по Інтернету, здійснювати операції по Інтернету.

Answer the questions:

1. How does the computer help pupils at school?
2. Is it comfortable to send messages to each other?
3. How do the commercial users use the Internet?
4. How do the American banks use the Internet?
5. Why does the American bank use the Internet?

WORLD WIDE WEB

Read the text.

The World Wide Web makes up a very large percentage of the Internet. Nearly seventy percent of all information searches are handled through the World Wide Web. Information is quickly found in the World Wide Web through typing in key words. The key words are searched through different search engines, such as Infoseek and Lycos, or through search directories, such as Yahoo and Magellan. These search engines look for key words in their databases. The search results from the search engine are then listed and the user can choose from the titles found. WWW is often also simply mentioned as Web. Web Pages can include texts, pictures, sound- files, animation's, videos and so on. With the new language "Java", which is used for programming Web-pages, there are several more possibilities to design a Webpage. Most people, who are not as well informed about the Internet as you might be after this speech, think that the WWW is, besides E-mail, the only service in the Internet. But there are several other services.

WHAT'S THE DIFFERENCE BETWEEN THE WEB AND THE INTERNET?

Read the text and choose the best word.

Some people think that the internet and the Web are the same thing, but in fact they are different.

The internet (often called simply "the net") is a global 1 *network / net* of interconnected computers.

These computers communicate with each other 2 *over / through* existing telecommunications

networks – principally, the telephone system. The Word Wide Web (usually known as just "the Web")

is the billions of web pages that are stored on large computers called web
3 *servers / services*.

To 4 *see / access* the web, you need a computer and a modem. You then
connect over your

telephone line to an internet service 5 *port / provider* (ISP), which sends
your request to view a

particular web page to the correct web server.

Websites are not the only service available on the internet. It is also used
for many other functions,

including sending and receiving email, and connecting to newsgroups and
6 *discussion / talking*

groups.

You could say that the internet is a system of roads, and web pages and
emails are types of traffic that travel on those roads.

Web addresses

Web address / URL

<http://www.acblack.co.uk>

domain name

www.acblack.co.uk

host:

acblack

protocol:

http://

type of site:

co.uk

country code

uk

**Put these operations in the order that you do them (variations are
possible).**

close down your browser

connect to your ISP

disconnect from the internet

enter a web address (also known as a URL*) into the address field

launch your browser (for example, Internet Explorer, Netscape Navigator or Mozilla Firefox)

perhaps wait for a few seconds while the web-page downloads

view the page

URL stands for Uniform Resource Locator, but the full term is almost never used

C. Choose the best words.

1. ADSL* is more commonly known as _____.

- a) longband b) broadband c) wideband

2. Broadband internet connection is much faster than _____.

- a) dial-in b) dial-through c) dial-up

3. Before you can connect to the internet for the first time, you have to _____ an account with an ISP.

- a) set b) set up c) set in

4. Each time you want to connect to your ISP's system, you have to enter a log-in name and a _____.

- a) . security word b) safe word c) password

5. You can set your computer to _____ your log-in details, so you don't have to type them in each time.

- a) . store b) remember c) recall

6. With a broadband connection, you usually have to pay a _____.

a) fixed monthly b) fixed monthly fee c) fixed monthly cost price

7. With dial-up, you can usually choose a _____ tariff.

- a) pay-as-you-go b) pay-what-you-want c) pay-if-you-like

8. Some broadband contracts limit the amount of _____ you can have each month.

- a) pages b) traffic c) use

9. Looking at web pages can be called "navigating the Web" but is more commonly called _____.

- a) "surfing the net" b) "skiing the net" c) "swimming the net"

10. You can often find the answer to a question by _____ on the internet.

- a) looking at it b) looking for it c) looking it up

11. When your computer is not connected to the internet, it is _____.

- a) out of line b) offline c) off the line

12. Internet banking is also called _____.

- a) online banking b) on the line banking c) inline banking

13. An unexpected disconnection from the internet is called a _____.

- a) lost connection b) missed connection c) dropped connection

14. A file which is copied from the internet onto your computer is called _____.

- a) an upload b) a download c) a load

15. Downloading files from the internet can _____ your computer with a virus.

- a) . infect b) contaminate c) dirty

Internet terms

Choose the best words to complete the sentences.

1. "The website gets a thousand hits a week" means the website has a thousand _____ a week.

- a) . sales b) visits c) search engine matches

2. The words, images and other material that make up a website are called _____.

- a) the contents b) the content c) the filling

3. Designs and drawings in websites are usually called _____.

- a) web pictures b) web graphics c) web illustrations

4. Moving pictures in websites are usually called _____.

- a) cartoons b) movies c) animations

5. Websites with sounds and/or video clips and/or animations have _____ content.
- a) multimedia b) many-media c) mixed-media
6. A space in a website where you enter information (address, password etc.) is called a _____.
- a) . box b) strip c) field
7. A hyperlink (see 3.3) is often called just _____.
- a) a link b) a hyper c) an HL
8. In real time (see 3.4) means _____.
- a) during working hours b) instantly c) in British Standard Time
9. A place with computers for public internet use is usually called an internet café or _____ even if they don't serve coffee.
- a) web café b) computer café c) cyber café
10. Internet cafés offer internet _____.
- a) connection b) availability c) access
11. A program that adds functions to a browser (eg Shockwave) is called a ____.
- a) plug b) plugged-in c) plug-in
12. Temporary internet files are stored in the _____.
- a) . cash b) cache c) cashe
13. Colors which all browsers can display without problems are called _____ colors.
- a) . browser safe b) browser acceptable c) browser easy

Internet security

Choose the best words to go into each of the spaces.

1. A person who illegally accesses somebody else's computer over the internet is called a _____.
- a) pirate b) hack c) hacker
2. A website which (in theory) cannot be accessed by a hacker is _____.
- a) strong b) secure c) clean

3. A website which can only be viewed by authorized people has _____ access.
- a) reduced b) small c) restricted
4. Unwanted advertising emails are popularly known as _____.
- a) meatloaf b) spam c) sausages
5. Software which blocks attempts by others to access your computer over the internet is called a _____.
- a) firewall b) fire blanket c) fire engine
6. It's essential to _____ your anti-virus protection regularly.
- a) up-to-date b) date c) update
7. Anti-virus software can _____ your computer for viruses.
- a) detect b) review c) scan
8. Anti-virus software can also _____ viruses on removable media, such as floppy disks.
- a) detect b) control c) see
9. When your anti-virus software subscription _____...
- a) ends b) stops c) expires)
10. ... it's a good idea to _____ it immediately.
- a) . renew b) renovate c) replace

SCIENTIFIC AND TECHNOLOGICAL PROGRES

Read the text.

It's difficult to overestimate the role of science and technology in our life. They accelerate the development of civilization and help us in our co-operation with nature. Scientists investigate the laws of the universe, discover the secrets of nature, and apply their knowledge in practice improving the life of people.

Let's compare our life nowadays with the life of people at the 'beginning of the 20th century. It has changed beyond recognition. Our ancestors hadn't the slightest idea of the trivial things created by the scientific progress that we use in our every day life. I mean refrigerators, TV sets, computers, microwave ovens,

radio telephones, what not. They would seem miracle to them that made our life easy, comfortable and pleasant. On the other hand, the great inventions of the beginning of the 20th century, I mean radio, airplanes, combustion and jet engines have become usual things and we can't imagine our life without them.

A century is a long period for scientific and technological progress, as it's rather rapid. Millions of investigations, the endless number of outstanding discoveries have been made. Our century has had several names that were connected with a certain era in science and technology. At first it was called the atomic age due to the discovery of the splitting of the atom. Then it became the age of the conquest of space when for the first time in the history of mankind a man overcame the gravity and entered the Universe. And now we live in the information era when the computer network embraces the globe and connects not only the countries and space stations but a lot of people all over the world. All these things prove the power and the greatest progressive role of science in our life.

But every medal has its reverse. And the rapid scientific progress has aroused a number of problems that are a matter of our great concern. These are ecological problems, the safety of nuclear power stations, the nuclear war threat, and the responsibility of a scientist.

But still we are grateful to the outstanding men of the past and the present who have courage and patience to disclose the secrets of the Universe.

Give the English equivalents for:

Прискорювати розвиток цивілізації, дослідити закони всесвіту, змінюватися до невпізнанності, здаватися чудом, вік завоюванні космосу, вперше в історії людства, виходити у всесвіт, пробуджувати велику кількість проблем, причина інтересу (зацікавленості), мати мужність і терпіння, виявити секрети.

Answer the questions.

1. What accelerates the development of civilization and helps us in our cooperation with nature?
2. How did our life change from the beginning of the 20th century?
3. What names has our century?
4. What outstanding discoveries in our century do you know?
5. What problems has the rapid scientific progress?

SURFING THE NET

Read the text.

What is more impressive than the pyramids more beautiful than Michelangelo's *David* and more important to mankind than the wondrous inventions of the Industrial Revolution? To the converted, there can be only one answer: the Internet that undisciplined radical electronic communications network that is shaping our universe! Multimedia, the electronic publishing revolution, is entering every area of our lives — college, work and home. This new digital technology combines texts, video, sound and graphics to produce interactive language learning, football, music, movies, cookery and anything else you might be interested in. The industrial age has matured into the information age; wherein the means to access, manipulate, and use information has become crucial to success and power. The electronic superhighway provides an entry to libraries, research institutions, databases, art galleries, census bureaus, etc. For those of us interested in intercultural communications Cyberspace is a universal community, with instant access not only to information anywhere, but also to friends old and new around the globe.

The Internet is an amorphous global network of thousands of linked computers that pass information back and forth. While the Internet has no government, no owners, no time, no place, no country, it definitely has a culture, which frequently approaches anarchy; and it has a language, which is more or less English. People who interact in an Internet environment know how

addresses are formed, how to use e-mail, ftp, Usenet News, Telnet, and other software tools.

Like all new worlds, Cyberspace has its own lingo, for example: *e-bahn*, *i-way*, *online*, *freenet*, *web page*, *freeware*, *browser*, *gopher*, *archie*, *gateway*. There are words to describe people who roam the net: *netters*, *e-surfers*, *internet surfers*, *netizens*, *spiders*, *geeks*...

The Internet has its own prerogatives: for example, the dismissive term *iurker* for the person who hangs around the net, reading what is there but not contributing anything. The term *flaming* refers to the public humiliation of another netter as punishment for a real or imagined transgression against net culture.

Large-scale use of computer-to-computer transfer of information was implemented by the US military in the late 60s and early 70s — part of the superpower competition of the cold war and the arms race. The US military created an electronic network (Arpanet) to use computers for handling the transfer of large amounts of sensitive data over long distances at incredible speed. Computer-to-computer virtual connections, using satellites and fiber optics, have distinct advantages over telephone or radio communications in the event of a nuclear attack. Mathematicians and scientists (and their universities) have been linked and electronically exchanging information over the Internet since the mid-70s.

Now the Internet has become commercialized with private and public companies offering access to it. (CompuServe — is the best known international commercial electronic access provider). The Internet is being expanded and improved so that every home, every school, every institution can be linked to share data, information, music, video and other resources. If you have a computer or a computer terminal, some kind of connection (probably, modem and telephone line) to the Internet, and some kind of Internet service provider, you can participate in electronic communication and become a citizen of the global village.

Information technology is a good vehicle for the argument. Some scientists remind us that voluminous information does not necessarily lead to

sound thinking. There are many genuine dangers that computers bring to modern society: efficient invasion of privacy, over reliance on polling in politics, even abdication of control over military decision-making. *Data glut* obscures basic questions of justice and purpose and may even hinder rather than enhance our productivity. *Edutainment* software and computer games degrade the literacy of children. On the other hand, only a few use PCs on network to share information and ideas. In most cases IT is used to speed routine tasks, to automate manual processes rather than to change work patterns and business practices. Most managers use their PCs to edit documents – not a good use of their time when they could be dreaming up creative applications. It is time to evaluate anew the role of science and technology in the affairs of the human species.

So, if you are riding on the information highway, you should take steps to cope with information overload. The gift of boundless information is causing a new kind of stress known alternately a *technostress*, information overload or Information Fatigue Syndrome. Some experts say that we don't get anywhere near the data it takes to overload our neurons. According to some estimates, our mind *as* capable of processing and analyzing many gigabytes of data per second – a lot more data than any of today's supercomputers can process and act on in real time. We feel overloaded by the quantity of information because we are getting it unfiltered. We should filter out the junk and turn data into shapes that make sense to us. Stress in moderation is good: it drives us to achieve, stimulates our creativity and is the force behind social and technological breakthroughs. Stress is revealing how humans are in some ways more primitive than the technology they have created. Meditation, muscular relaxation, aerobics, jogging, yoga can be effective stress relievers, but no technique is universal: experiment and find the one that best works for you.

The cornerstone of an economy are land, labor, capital and entrepreneurial spirit. That traditional definition is now being challenged. Today you find a fifth key economic element: *information* dominant. As we evolve from an industrial to an information society, our jobs are changing from physical to mental labor. Just as people moved physically from farms to factories in the

Industrial age, so today people are shifting muscle power to brain power in a new, computer-based, globally linked by the Internet society.

Translate some computer terms into Ukrainian:

Simple terms: anchor, wizard, versioning, relink, cipher, containment.

Compounds: clipboard, multithreaded, client-pull, design-time, run* time, polyline, turnkey, bitmapping, bandwidth.

Term collocations: frame-based layout, active template library, active server pages, asynchronous moniker, active data objects, connectable object, frequently asked question, hypertext markup language, hypertext transfer protocol, integrated development environment, interface definition language, Internet service provider, object linking and embedding, remote procedure call, software development kit, uniform data transfer.

SERVICES

Read the text.

Uniform Resource Locator

Let's review URLs, or Uniform Resource Locators. These constitute the most common and efficient method of telling people about resources available via FTP, the World Wide Web, and other Internet services. A URL uniquely specifies the location of something on the Internet, using three main bits of information that you need in order to access any given object. First is the URL scheme, or the type of server making the object available - this could be an FTP, Gopher, or World Wide Web server. Second comes the address of the resource. Third and finally, there's the full path-name or identifier for the object. As a quick example, URLs (at least those for the Web) generally look something like this one (which points to the Microsoft Web server):<http://www.microsoft.com/>. If it starts with http, use Netscape or some other Web browser to access this url.

After the URL scheme comes a colon (:), which delimits the server type from what comes next. If two slashes (//) come next, they note that a machine name in the format of an IP address will follow, such as <http://www.microsoft.com/>. The last part of the URL is the specific information. With this information you're looking for the path to the directory of the file you desire. Directory names are separated from the machine name by a slash (/).

File Transfer Protocol

The second service which can be used is FTP. FTP stands for File Transfer Protocol, and not surprisingly, it's only good for transferring files between machines. In the past, you could only use an FTP client to access files stored on FTP servers. Today enough additional services such as Gopher and the World Wide Web, have implemented the FTP protocols so that you can often FTP files no matter what service you are using. You can even FTP files via E-mail. If you access a FTP-Server with a regular FTP-Client, you see the files listed, as they are listed in a normal UNIX System. You can also navigate by using UNIX-Commands. Or you can use a graphical FTP-Client, which shows directory-information in Windows-Style.

Usenet

The third service is called Usenet. This is split into over 30000 groups called Newsgroups. In each of them, people can post messages to the group-topic. Almost everything on Usenet is a discussion of some sort, although a few groups are devoted to regular information postings, with no discussion allowed. Of course, you can always ask your question, and you usually get an answer, even if it's the sort of question everyone asks. Common questions are called Frequently Asked Questions, or FAQs, and are collected in lists and posted regularly for newcomers. If you search for the Newsgroup of your interest, you will probably find it. For example, there are even some Newsgroups for collectors of butterflies.

Internet Relay Chat

IRC is the fourth service, which is a little like the Usenet - that makes it possible to hold live keyboard conversations with people around the world. It's a lot like an international CB radio - it even uses "channels." Type something on your computer and it's instantly echoed around the world to whoever is on the same channel with you. You can join in existing public group chats or set up your own. You can even create a private channel for yourself and as few as one or two other people. And just like on a CB radio, you can give yourself a unique "handle" or nickname. You can access over 20000 channels with different topics. For example, if you are interested in cars, you can easily connect to the #cars channel and chat with many other people who are also interested in cars.

Telnet

Telnet is the last service and it is not easy to explain to people who have had no experience with a modem. The best definition for Telnet that Telnet is like a normal ANSI modem-connection through the Internet. As with a standard modem, Telnet enables your computer to communicate with another computer somewhere else. As you give your modem a phone number to dial, you give Telnet an Internet address to connect to. And just like a modem, you don't really do anything else within Telnet itself, other than make the connection. In the vernacular, you say your "Telnet" to that remote computer. Once that connection is made, you're using the remote computer over the Internet just as you were sitting next to it. This process is unique because it enables me, for example, to Telnet any University in America (which probably runs a Telnet- Server) and use their Telnet-Server just as I did when I was actually there, and not 10,000 kms away in Austria.

Match the two parts of the mixed up Internet rules below.

People typing quickly a if they don't receive a reply and they may think there's something wrong with their

	system
Using capital letters in messages	b just send a one-line messages
Express yourself as clearly	c something very important to say
People get worried	d to download and cost time and money
If you're very busy	e LIKE THIS, is called shouting
Only shout when you have	f make lots of little errors
Long messages take a long	g and concisely as you can time

HOOSING THE RIGHT SOFTWARE FOR YOUR BUSINESS

Read the text.

Whether you're starting a new business or expanding an existing one, the software you use can make things much easier - or much more complicated. There are about a zillion different programs of varying function and capability, ranging in price from a few hundred dollars to a few hundred thousand dollars - but that doesn't mean you should necessarily go for the most expensive one you can afford.

Cost is always a factor in business management (though it may not be the *leading* factor), so the goal is to find software that does everything you need it to do without paying for bells and whistles or functions that don't apply to your business. Before you even start looking at individual programs, carefully evaluate your needs - then simply find the program that fits them (don't ever alter your needs to suit the software).

Business Type

If all you need is general accounting, your business type doesn't matter much when it comes to software. Heck, you could take care of that yourself with a well-designed spreadsheet on your existing software. More specialized programs, however, are designed with certain businesses in mind. Restaurants may want a program that also handles recipe cost and allows front-of-house to back-of-house

communication. Medical offices may need something that integrates insurance coding. Manufacturers could use materials tracking and supply chain info, while service-based businesses may prefer a task-timing option.

Business Size

There is software out there that will all but run your business for you – but they may cost several times the total value of your business itself. You don't need an M.B.A. to recognize that as a bad investment. Chances are, that mega-software has entire areas of function that you just wouldn't use. The right software investment is one that doesn't require a tremendous loan, and provides perfect functionality for your individual business. That means that there should ideally be no software feature that you're not using, but it shouldn't lack anything you need. Many smaller or mid-range programs offer add-ons at additional cost, which allows the software to grow with your business. This is the perfect scenario, as you can use the basic version for as long as it serves you, then pay for individual upgrades as they become necessary.

Features

Like any software developer, the companies that make business management software often load the thing with a bundle of tiny little features that inflate the price without adding any real value. If these are optional add-ons, avoid them. If they are bundled into the package and you cannot opt out, look for a more basic program. Some of these features may seem like a cool idea, but they're only worth paying for if you'll actually use them. For example - smartphone synching – sure, it's a neat idea and very technologically sleek. But do you really see yourself doing payroll from your phone? Mobile alerts and reminders are another – if you open the program everyday anyway (this is your business, after all), those very same alerts will pop up on your home screen. Do you really need them sent to your iPad?

Support

No matter how good software is, it's always made better with good customer support. Your fancy new software is useless if you can't figure out how to set it up in the first place. If you do try to set things up yourself on a wing and a prayer, pray that you don't type anything in the tax info section - or the IRS may come calling. Mistakes have a way of screwing you down the road. A company should stand firmly behind its product, and that means providing you with a rep who will train you and your staff to use the software to your utmost advantage, and set up any necessary networks, new terminals, etc. Larger software companies should have local reps that will actually come to you when there's a problem, instead of forcing you to spend hours on the phone with tech support. This is part of what you're paying for. Of course, these kinds of features don't come with the cheaper programs - then again, the simpler programs usually don't warrant that kind of hand-holding. Now that you have an idea of what you need, start looking around. Do your own research before you even speak to the first sales rep, because the pitch is hard and will throw you off track. Take advantage of trial periods before you buy, and get feedback from applicable staff before taking the final plunge.

Answer the questions:

1. What is the right software investment ?
2. Are there about a zillion different programs of varying function and capability?
3. The companies that make business management software often load the thing with a bundle of tiny little features, don't they?

WRITING

У цьому розділі є можливість самостійно відпрацювати практичні завдання з граматики.

Повторити граматичні правила з таких тем: «Побудова речення», «Багатофункціональні дієслова», «Модальні дієслова», «Система англійського дієслова», «Службові слова (прислівники)», та інші.

ENTRY TEST

1. Put the verbs in brackets into the correct tense.

(A) 1) _____ (you/ever notice) the scar on Bonnie's chin? She 2) _____ (get) it last year when she fell over. She 3) _____ (watch) a film on TV when the telephone 4) _____ (ring). As she went to answer it, she slipped on some water her husband 5) _____ (spill) on the floor.

(B) Mr McDermott 1) _____ (work) as a doctor. When he first 2) _____ (begin) his career in 1990, he 3) _____ (just/leave) medical school. He 4) _____ (open) his own doctor's surgery in 1992 and since then he 5) _____ (work) as a doctor. He 6) _____ (enjoy) his job and, at the moment, he 7) _____ (teach) young medical students in his spare time. He hopes that in the future he 8) _____ (continue) to help sick people and his fellow physicians.

(C) 1. She _____ (to graduate) from the University last year?

2. You ever _____ (to be) to London?

3. What you _____ (to do) now?

4. He _____ (not to perform) the work by 3 o'clock yesterday.

5. Mary already _____ (to carry out) the experiment.

6. Next year we _____ (to go) to Paris.

7. Why she _____ (to write) the article yesterday?

8. He _____ (not attend) lectures regularly.

9. We _____ (carry out) experiments in the laboratories.

10. The exam _____ (take place) in two hours.

Practice

Prepositions of Place and Movement.

Task 1. Complete each sentence using the correct preposition.

1. The CPU is a large chip _____ the computer.
a) on b) at c) inside d) into
2. Data always flows _____ the CPU _____ the address bus.
a) along, into b) from, down c) from, to d) from, into
3. The CPU can be divided _____ three parts.
a) on b) into c) in d) out of
4. Data flows _____ the CPU and RAM.
a) between b) along c) . around d) from
5. Heads move _____ the disk.
a) along b) across c) onto d) above
6. The hard disk drive is _____ a sealed case.
a) above b) in front of c) in d) inside
7. The basic operations that the machine can perform are built _____ the circuitry.
a) into b) on c) from d) between
8. The computer results are printed _____ tables.
a) on b) at c) down d) in
9. All the banks now keep their accounts _____ computer files.
a) inside b) on c) down d) in
10. Nowadays users of the World Wide Web hide their PCs _____ passwords.
a) in b) among c) under d) behind

Task 2. **Fill in the gaps with the appropriate prepositions from the right column.**

Local-area networks evolved ... (1) the large-scale

telecommunications networks. The need arose to permit the flows of information (2) universities and research labs. The underlying packet transmission came..... (3) the long-distance networks. The communication media were developed to support very high speed direct coupling (4) computers. One experiment affected the nature of modern local-area networks: the University of Hawaii wanted to connect terminals..... (5) the Hawaiian islands (6) a local computer and communications processor, and (7) there ... (8) other networks.

from (*3)
among (*2)
over
to(*2)

Task 3. Choose the appropriate preposition: in, on, at:

1. Algorithm is a list of instructions to a computer, which are carried out _____ a fixed order to find the answer to the question.
2. I was lucky to be present _____ one of her classes.
3. There is a diagram _____ the bottom of the page.
4. The index indicates the position of the element _____ the array.
5. More and more users tend to spend most of their time _____ the Internet.
6. Don't worry, he always comes _____ time.
7. Corporate knowledge bases are likely to be constructed _____ top of corporate databases.
8. The leading IT experts _____ the world devote their time and energy to the 5-th generation development projects.
9. _____ a queue data items are added _____ the back and removed from the front.

10. A neural-net computer is supposed to work _____ a higher speed than a conventional computer.

11. Conventional computers, _____ the other hand, cannot recognize images unless they have been programmed to do it.

Task 4. Complete the sentences choosing the appropriate preposition.

1. _____ present we are getting ready for our exams.
a) in b) at c) on d) –
2. There is a misprint _____ page 12.
a) at b) – c) in d) on
3. Yes, he is _____ the university. No, he always comes _____ time.
a) at, on b) in, in c) in, on d) at, in
4. I don't think we'll have free time _____ this weekend.
a) at b) on c) in d) –
5. _____ our last lecture he spoke about computer architecture _____ half an hour.
a) in, for b) at, during c) at, for d) on, -
6. The thesis will be finished _____ a few months.
a) during b) in c) within d) on
7. I have been writing a test _____ 2 hours.
a) on b) during c) since d) for
8. She has been working _____ this department _____ last year.
a) in, for b) on, during c) at, since d) in, since
9. I'll start working _____ the library tomorrow _____ early morning.
a) at, from b) at, since c) in, during d) in, in
10. The markup should appear _____ a particular point _____ time.
a) at, in b) in, on c) at, during d) at, from
11. SGML allows to transport the text from system to system _____ present and future.
a) in b) during c) at d) on

12. The 5th generation development projects are the main thrust of computer development _____ the next 10 years.

- a) in b) for c) on d) from

Task 5. Fill in the verb to be in the necessary form and tense:

1. Digital cameras ... power hungry.
2. Here ... an example of a simple virus, the Lehigh virus.
3. 'Experience ... the name everyone gives to their mistakes' (Oscar Wild).
4. Where ... robots particularly useful?
5. I ... currently a Systems Programmer.
6. The use of credit cards instead of cash ... increasing rapidly.
7. The keyboard, as well as the mouse and the mouse pad, ... on the desk.
8. The Web Developer and the E-commerce Consultant ... in the negotiation room now.
9. ... electronic mail a system of using computers for sending messages from one place to another?
10. ... these men cyberterrorists or cybercriminals ?
11. Viruses ... an area of pure programming.
12. Multimedia ... (not) a new phenomenon.
13. People who ... computer literate have a better chance of finding a job.
14. It ... a 32-bit computer.
15. It ... nearly midnight. It ... a hard day.
16. The data ... collected by various researchers some years ago.
17. Mathematics ... my favorite subject when I ... at school.
18. We ... linked to the on-line database at our head office.
19. IT ... the science and activity of storing and sending out information by using computers.
20. The money I borrowed ... (not) enough to pay for your course.
21. This ... highly confidential information.
22. On-line services ... a major part of the Internet infrastructure.

23. MS-DOS ... used in the first PCs.
24. In capsulation, inheritance and polymorphism ... key features of Object - Oriented Programming.
25. John, along with his friends, ... familiar with these software programs.
26. Qualifications ... important.
27. Power consumption and cost ... very significant factors in Bluetooth's design.
28. Two hours per week ... (not) enough to learn a foreign language.
29. ... the number of students learning English rising?
30. Ten dollars ... quite a lot of money to lose.
31. The press ... often unfair to political candidates.
32. A number of students ... being examined now.

Task 6. Choose the correct item:

1. (A/The) number of elements in the array (is/are) fixed when the array is created.
2. (A/The) number of items (is/are) pushed into a stack.
3. (A/The) number of peripheral devices (is/are) linked to the processor.
4. The size and complexity of a language can be measured by (a/the) number of reserved words it uses.
5. (A/The) number of techniques of knowledge processing (is/are) being carried out.
6. There (is/are) (a/the) number of report generators.
7. (A/The) number of computer retail chains (has/have) been hit hard by the recession.
8. (A/The) number of people using the Internet (is/are) growing by thousands each month.
9. IBM and (a/the) number of British companies all figure in his career background.
10. PL/I even permits (a/the) number of significant figures in a number to be declared.

Task 7. Fill in the verb to be in the necessary form:

1. There ... about 10 people interested in artificial intelligence.
2. There ... a handful of clipboard computers on the market now.
3. When I came in, there ... pages of computer print-out all over the desk.
4. There ... a few ways to become infected with a virus. 68
5. There ... a lot of software that is free.
6. There ... a lens, a viewfinder and a CCD (a charge coupled device) in a digital camera.
7. There ... some new laboratories at our faculty next year.
8. There ... no limit to the type of business where data mining can be beneficial.
9. There ... several techniques for achieving that. But you failed to use them.
10. There ... many Flash memory products such as the video cards in video game systems.
11. There ... Hardware, Planning, Design, Software Development, Applications, Communication and Programming in my diploma course last year.
12. There ... something wrong with my PC. Could you help me?
13. There may ... a number of B-frames between I or P-frames.
14. What problem ... there with the existing system?
15. There ... a myriad of certificates to study for.

Task 8. Write sentences by putting the words in the correct order:

1. was/a/practical component/there/the/course/in
2. no/film/there/in/is/digital/a/camera
3. to use/there/courses/are/how/some/good/on/the Internet
4. bite/there/eight/in/are/a/bits
5. systems/a lot of/ file/are/there
6. cybernetics/a/was/lecture/there/on/yesterday

7. eight/there/computer/its/uses/are/steps/in/that/any/work/doing
8. Web/on/restrictions/there/no/are/my space/use/of

Task 9. Ask questions beginning with the words in brackets:

1. There are two solutions of this problem (How many...)
2. There is a help group on the Web. (What...)
3. There are several reasons to use Flash memory instead of a hard disk.
(Are...)
4. There are 3 photo-transistors in each pixel in the CCD. (What...)
5. There is nothing to stop you having more than one free ISP account.
(Is...)
6. There is a line receiver in the room. (What...)
7. There were 3 stages in planning my Website. (How many...)

Task 10. Make the sentences negative:

1. An operating system has three main functions.
2. We usually have a break at 10.30.
3. I've got a lot of money.
4. These users had access to Microsoft Office.
5. They are having a row about money.
6. We had a good time on holiday.
7. British scientists have a world lead in virtual reality.

Task 11. Fill in the appropriate form of the verb "to have":

Exam Success.

If you 1...(not/have) much experience of examinations, read the following notes carefully. First of all, if you are taking the exam the next day, make sure you 2... (have) a good night's rest. Check that you know exactly where the exam is going to take place. You shouldn't sit the

exam on an empty stomach so 3...(have) a good breakfast but don't overdo it. Try and get to the university in good time so you 4...(have) enough time to find the right room. As soon as you 5...(have) your paper, take a deep breath. Read the question carefully and try to concentrate. Don't rush – take your time.

Task 12. Fill in the appropriate form of the verb 'to have':

1. I think we should buy a new monitor. We ... this one for ages.
2. Don't phone at 8.00 this evening. We ... dinner then.
3. I ... my first computer when I was 19.
4. I ... three computers by the time I was 20.
5. I'd like ... a look at this concept.
6. Can I ... a word with you in private?
7. Many IT managers ...(not) degrees in computer science.
8. A computer virus ... two parts, an infector and a detonator. They ... two different jobs.
9. Linux ... its roots in a student project.
10. ... you ever ... a problem with a virus?
11. Many people say we ... never ... an intelligent computer.
12. Her house ... a network but it ...(not) an electronic door-keeper.
13. Shall we ... a break now?
14. Neither of them ... experience in Java Script.
15. ... you ... any problems last year? Not so many.
16. Computer chess players ... no concept of strategy.

Task 13. Fill in with an adverb of frequency:

1. Minicomputers don't require an air-conditioned environment. (generally)
2. The database program asks you for your choice. (usually)
3. Computers make mistakes. (seldom)

- 4.Computers break down. (occasionally)
- 5.These days children make contact with a computer through computer games. (often)
- 6.Millions of people try to find information on the Internet. (every day)
- 7.People buy CDs nowadays. (usually)
- 8.I borrow her CDs and she borrows mine. (often)
- 9.My computer is very reliable. I have a problem with it. (never)
- 10.A computer system is easier to use if you have a computer mouse. (usually)

Task 14. Make the sentences negative:

- 1.She uses a computer.
- 2.When you switch on the computer you see a green light.
- 3.I want to make a start in computer personnel.
- 4.These keys carry out special functions.
- 5.The computer center opens too late.
- 6.This operating system supports other layers of software.

Task 15. Choose the correct item:

- 1.MS Windows ... the computer screen into windows.
a) divide b) doesn't divide c) divides d) don't divide 99
- 2.Computers ...enormously in size, processing power or cost.
a) varies b) vary c) doesn't vary d) don't vary
- 3.Each device ... a precisely specified task.
a) doesn't perform b) perform c) performs d) don't perform
- 4.Input devices ... data to the processor.
a) supply b) don't supply c) supplies d) doesn't supply
- 5.Output devices ... or ... data from the processor.
a) don't b) prints or c) print, d) doesn't print
print or display displays display or display

6. Minicomputers ... an air-conditioned environment.
 a) requires b) don't require c) doesn't require d) require
7. A modem ... data into signals.
 a) doesn't change b) changes c) change d) don't change
8. I ... regularly, so I often lose data.
 a) back up b) doesn't back up c) backs up d) don't back up
9. Systems programmer ... the systems software for the computer.
 a) writes b) doesn't write c) don't write d) write
10. Supercomputers ... information very fast.
 a) processes b) don't process c) process d) doesn't process
11. Individual units ... together to achieve some common objectives.
 a) works b) don't work c) work d) doesn't work
12. Computers ... you to type and print any kind of document.
 a) allow b) don't allow c) doesn't allow d) allows

Task 16. Choose the correct item:

1. How often ... you play computer games?
 a) does b) are c) is d) do
2. What type of computer games ... you prefer?
 a) are b) do c) does d) is
3. Describe your favorite computer game. What ... the best thing about it?
 a) are b) do c) does d) is
4. ... computer games create addiction or dependence?
 a) can b) does c) are d) am
5. ... you play computer games for fun?
 a) do b) does c) is d) are

Task 17. Put the verb in Present Simple or Present Continuous:

Supermarkets in the US (test)1 a new robot checkout system. The machines (attract)2 interest from several European chains. Shoppers (start)3 by touching a video screen which (give)4 instructions on how to

pass the shopping over a scanning window. As the customer (do)⁵ this, the system (get)⁶ information from the customer and (print)⁷ a bill. Customers can pay by credit without human contact. The largest American supermarket chain (study)⁸ customer reaction. 25 % of the customers (prefer)⁹ the system but 25% (hate)¹⁰ it because they are afraid of the technology and like human contact.

Task 18. Fill in with the verbs in Present Simple, Present Continuous or Past Simple.

Mr. Scott: – I see you 1 (to do) a computer science degree at Aston University and you 2 (spend) your sandwich year with British Gas. How 3 (to be) that?

Mr. Brown: – It 4 (to be) great. I really 5 (to enjoy) it. It 6 (to be) really good to get some work experience and apply some of the ideas I 7 (to learn) at college.

Mr. Scott: – And then you 8 (to go) to NCR. What 9 (to do) you 10 (to do) there?

Mr. Brown: – I 11 (to work) as an analyst programmer for a year. I 12 (to write) software for general commercial use. The programs 13 (to be) for use on IBM mainframes and minicomputers.

Mr. Scott: – And have you worked with databases at all?

Mr. Brown: – Yes, quite a bit. I usually 14 (to work) with Microsoft Access and dBase 5.

Mr. Scott: – Good. And what about your present job?

Mr. Brown: – Well, I 15 (to write) programs in COBOL for use in large retail chains. I 16 (to write) instructions, 17 (to test) the programs and 18 (prepare) the documentation.

Mr. Scott: – Fine. That 19 (sound) the sort of experience we 20 (look for). What about foreign languages? Do you have any?

Mr. Brown: – Yes. I 21 (speak) Italian and a bit of Spanish. Now I 22 (learn) French.

Mr. Scott: – Good. Well, your current job 23 (sound) quite interesting. Why 24 (do) you 25 (want) to leave it?

Mr. Brown: – I 26 (want) something new demanding. I'd like more responsibility and I'd like to learn about a new industry.

Task 19. All these sentences are not true, so correct them. First, make the sentences negative, then give the right variant using the information in brackets.

1. Apple introduced the Macintosh in 1914. (in 1984)
2. The Mac's processor produced poor graphics. (excellent)
3. The Mac used only words to show machine and program functions. (icons-diagrams)
4. The mouse was developed by Apple. (at Xerox's Palo Alto facility)
5. The Mac was very difficult to use without special training in computers. (very user-friendly)
6. The Internet began for business. (for military reasons)
7. The Internet started in 1959. (in 1969)
8. IBM designed the first microprocessor in 1971. (Intel)
9. Gates and Bush founded Microsoft in Mexico, in 1975. (Gates and Allen, in Albuquerque, New Mexico)
10. Apple launched their new XP operating system in 2001. (OS X operating system)

Task 20. Choose the correct item:

1. I _____ the information on their website. It was really useful.
a) look up b) looks up c) looking up d) looked up
2. In airports computers _____ radar systems.
a) manage b) managed c) are managing d) don't manage
3. Computers _____ you to type and print any kind of document.
a) allows b) allowed c) don't allow d) allow

4. This hardware _____ the market last year.
 a) reaches b) reached c) didn't reached d) reach
5. He _____ looking for a job in the spring.
 a) begin b) begins c) began d) is beginning
6. Yesterday I _____ ten units in this book.
 a) work through b) am working through c) worked through d) works through
7. I _____ an offer of \$10 for her old CD player.
 a) am making b) made c) make d) makes
8. My computer, which I _____ last year, is already out of date.
 a) buy b) bought c) buys d) am buying
9. Computers _____ racing cars.
 a) designs b) design c) are designing d) designed
- and construct and construct and constructing and constructed
10. Bill Gates _____ Microsoft.
 a) found b) finds c) is founding d) founded
11. PCs _____ sound, text and animated images.
 a) combines b) are combining c) combine d) combined
12. You _____ the printers 3 weeks ago.
 a) deliver b) delivered c) are delivering d) delivers
13. Many homes _____ computers.
 a) are having b) has c) had d) have
14. One in ten people _____ a computer.
 a) owned b) are owning c) own d) owns
15. We now _____ a calculator instead of a slide rule.
 a) use b) are using c) used d) don't use
16. The history of robots _____ only in the twentieth century.
 a) begins b) is beginning c) began d) begun
17. The students _____ the professor at the end of the lecture. It was so interesting.
 a) applaud b) applauded c) are applauding d) applauds
18. I _____ really surprised when I got your e-mail.
 a) were b) am c) is d) was

19. At that time the program _____ a lot of interest on computer technology.

- a) stimulated b) stimulate c) stimulates d) is stimulating

20. I always _____ about cheap holidays on the Internet.

- a) find out b) found out c) am d) founded out

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finding out

21. The Mark I _____ 50 feet long and 8 feet high.

- a) was b) is c) am d) are

22. All computers _____ of one or more functional devices.

- a) consisted b) consist c) are consisting d) consists

23. The phrase plug-compatible _____ units which may be connected in this manner.

- a) is describing b) describe c) describes d) described

24. Who _____ the digital computer?

- a) did invent b) invents c) is inventing d) invented

Task 21. Fill in with the verbs in Present Simple, Present Continuous or Past Simple.

I 1 (to write) a report on the computer this morning. When I 2 (to finish), I 3 (to print out) two copies - one for me and one for my boss. Then without any warning, the computer 4 (to go down), and I'm afraid I 5 (to lose) the whole document. This is very unusual because normally I 6 (to save) the data while 7 (to write) and then 8 (to make) a back-up copy; this morning I 9 (to forget).

Anyway, I 10 (to give) the report to my boss. She 11 (to think) it was a bit too long and 12 (to ask) me to use more graphics. She 13 (to think) it would make the report more attractive.

I 14 (to go back) and 15 (to rewrite) most of the report when the computer 16 (to be) Ok.

It 17 (to look) better, and this time I 18 (to remember) to save it and make a back-up copy.

Task 22. Complete the pairs of sentences. Use the Present Perfect in one sentence and the Past Simple in the other.

1. I (know) _____ her for six years.
I (know) _____ him when I was at school.
2. He (live) _____ in Paris from 1997 to 2000.
He (live) _____ in New York since 2001.
3. Where's Pete? I (not see) _____ him for ages.
I (not see) _____ Pete last night.
4. We (be) _____ at primary school from 1993 to 1998.
We (be) _____ in this class since September.
5. I (not watch) _____ this video yet.
I (not watch) _____ a video at the weekend.

Task 23. Fill in “since”, “for”, “already”, “just”, “yet” or “ever”:

1. We have ... bought a computer.
2. Have you ... used e-mail?
3. I haven't printed anything ... morning.
4. –Have you ... finished scanning in the photographs?
–I haven't even started
5. They've used this operating system ... 10 years.

Task 24. Put the verbs in brackets into the Present Perfect:

1. Computers (become) more powerful.
2. Scientists (just make) important discoveries about human genetics.
However they (not yet find) a cure for many diseases.
3. – Mars explorer (send) us new information about Mars?
– It (study) samples of rock on the planet.
4. A lot of people (start) to use Linux system because they think it is better than Microsoft's Windows programs.
5. Sarah Flannery, a sixteen-year old Irish schoolgirl, (develop) a

code that is easy to use but impossible to break.

6. He (invented) lots of different computers but this year he (not work) on many projects.

7. NASA (send) spaceships to a lot of different planets of the solar system?

Task 25. Make up sentences following the pattern. Use time adverbs and expressions with Present Perfect:

Pattern: – Have you ever been abroad?

– I have never been abroad.

1 – buy a brand new car

2 – discuss genetic algorithms

3 – be told to write a program in a high level language

4 – be asked to make a report on Artificial Intelligence

5 – use the Internet while preparing your report

6 – be advised what websites to visit

7 – destroy data in your computer

Task 26. Complete each question and give a short answer:

1.... you heard about this new language? (Yes...)

2.... the virus spread and caused further damage? (No...)

3.... he ... received the virus protection program? (I hope...)

4.... this IT manger ... working in the industry for 5 years? (No, ...)

5.... you also discussed limitations of this problem? (Yes, ...)

6.... they made an attempt to penetrate our computer system? (Yes, ...)

Task 27. Replace the infinitive in brackets by the correct tense form:

1. Gates and Bush (to found) Microsoft in 1975.

2. After first appearing as a novelty computer viruses (to become) a significant problem.

3. At the age of 29 Boole (to discover) something that the great mathematicians of his time (to miss) – an algebraic theory of invariance.

4. Don't you think that it's the most dangerous experiment we (to make) ever
5. As we found out in complex applications speech and moving images (to be integrated) with data.

6. Computers (to come) from nowhere 50 years ago and rapidly (to catch up) with the human brain.

7. We (to need) an electronic version available anywhere and updated regularly as soon as we start this project.

Task 28. Use Past Perfect or Past Simple:

1. The detailed properties 1.....(to be) summarized with our adviser by the meeting.

2. When the first digital computer 2.....(to be) developed, the first analog computer already 3.....(to be) in use for some time.

3. Scott reached the South Pole in 1912 but Amundsen 4.....(to beat) him by a month.

4. He 5.....(to be) broke. He 6.....(to spend) all his money.

5. Before John Kennedy 7.....(to become) president in 1960 he 8.....(to say) that the state of the country was bad.

6. The first 'distributions' 9.....(to appear) by 1992.

7. When he 10.....(to write) a basic kernel, he 11.....(to release) the source code to the Linux kernel on the Internet.

8. She hoped her browser 12.....(to find) the page she wanted.

9. By the end of the month she 13.....(to delete) some messages from the server.

10. 14.....(to come) a minute late. Eve 15.....(to design) already a site.

11. Sam couldn't 16.....(to use) the machine because it 17.....(to be) in the rain for some time.

12. Columbus 18.....(to discover) America, though at first he believed he 19.....(to reach) Asia.

13. Before Columbus 20.....(to discover) America, people 21.....(to believe) that the earth was flat.

14. By the time he was 12, he 22.....(to be able to) to speak two foreign languages.

15. He 23.....(to receive) an e-mail message and 24.....(to send) it to another address.

16. He could use the ISP as he 25.....(to pay) for his online time.

17. Helen was happy. She 26.....(to create) the site using a program called Netscape Composer.

18. The teacher 27.....(to want) to know if I ever 28.....(to have) a problem with a virus.

19. She 29.....(to fail) the exam because she 30.....(not to study).

20. He 31.....(to click) on the icon with the mouse and 32.....(to get) on the Internet.

Task 29. Put the verbs in brackets in Past Simple or Past Perfect:

I went to a school reunion last week. I 1.....(to be) very surprised - so many things 2.....(to change). They 3.....(to knock down) the old gymnasium, and the library 4.....(disappear). I 5.....(to walk) slowly round the school. Everything 6.....(seem) much smaller, although they 7.....(to build) some impressive new buildings. I 8.....(meet) lots of my old school friends, too, and they 9.....(not stay) the same either. Some of them 10.....(to move) to London, and most of them 11.....(to get) married. I 12.....(to talk) to the headmaster for a while - he 13.....(not to leave). He 14.....(to say) that he 15.....(to remember) every boy who 16.....(to attend) the school since he 17.....(to start) working there in 1982. But when I 18.....(to ask) him what my name was, he 19.....(to forget) that 20.....(to make) me realize that I 21.....(to change) too.

Task 30. Put the verbs in brackets in the Past Simple or in the Present Perfect.

1. I _____ (never/ be) to the USA. I _____ (want) to go there last summer but I couldn't.
2. He _____ (live) in this street all his life.
3. His father _____ (come back) to London last Sunday.
4. Yan _____ (write) a letter to Nick two days ago.
5. He _____ (send) his letter yesterday.
6. They _____ (just/ buy) some postcards.

Task 31. Fill in with last night, ever, ago, just, yet, always in the right place.

1. Nick's uncle went to Russia 3 years.
2. Mr. Rambler has come back from Berlin.
3. Nick has wanted to visit Scotland.
4. Mr. Rambler saw Michael.
5. They haven't visited this old castle.
6. Have you been to England?

Task 32. Put the verbs in brackets in the Past Simple or in the Present Perfect.

1. I (have, just) _____ a nice pot of coffee. Would you like a cup?
2. I (see, not) _____ Steve this morning yet.
3. Carol and I are old friends. I (know) _____ her since I (be) _____ a freshman in high school.
4. Maria (have) _____ a lot of problems since she (come) _____ to this country.
5. I (go) _____ to Paris in 2003 and 2006.
6. A car came round the corner and I (jump) _____ out of the way.
7. Don't throw the paper away because I (not to read) _____ it yet.

8. Is Jim going to eat lunch with us today? — No. He (eat) _____ (already). He (eat) _____ lunch an hour ago.

9. Since we (start) _____ doing this exercise, we (complete) _____ some sentences.

10. I (be) _____ never to Italy.

Task 33. Put the verbs in brackets in the Past Simple or in the Present Perfect.

1. She (change) _____ a lot since she left school.

2. I (see) _____ this film and I don't want to see it again.

3. Jazz (originate) _____ in the United States around 1900.

4. Tom Hanks (win) _____ an Oscar several times already.

5. Long ago, they (build) _____ most houses out of wood.

6. Scientists still (not/find) _____ a cure for cancer.

7. Sean (eat, never) _____ Chinese food before.

8. In my first job, I (be) _____ responsible for marketing.

9. The last job I (apply) _____ for required applicants to speak some Japanese.

10. The first modern Olympics (take) _____ place in Athens more than a hundred years ago.

11. I am writing in connection with the advertisement which (appear) _____ in December.

Task 34. Complete the sentences. Use the Present Perfect or the Past Simple.

My family and I (move) from London to Cardiff last summer, so we (live) in

Cardiff for seven months now. I miss my friends in London. My best friend is

called Megan. We (meet) at primary school, so I (know) her for nine years.

Unfortunately, I (not see) her since last summer.
I go to Greystone Secondary School in Cardiff. I (be) at the school since
last
September. At first I (not like) it because I (not have) any friends here.
But the
students in my class are really nice and I'm happy here now.

Task 35. Use the Past Perfect or the Past Simple.

1. When the police ... (arrive), we already ... (catch) the thief.
2. Jack ... (finish) the test before the bell ... (ring).
3. When Anna ... (come) to say good-night, her children already ... (fall asleep).
4. Scott already ... (prepare) the dinner when her husband ... (get) home from work.
5. When Brad and Susan ... (get married), they ... (know) each other for 3 years.
6. She ... (not enjoy) the film because she ... (read) the book before.
7. Our apartment ... (be) in a mess because I ... (have) a birthday party the night before.
8. We ... (not go) to a restaurant because we ... (spend) all our money on clothes.
9. Mary ... (can't go) skating after she ... (break) her leg.
10. Larry ... (be late) because he ... (get stuck) in a traffic jam.

Task 36. Use the Past Perfect

1. By twelve o'clock our English teacher (to examine) all the students.
2. I remembered that I (to drink) all the milk yesterday.
3. By ten o'clock yesterday I (to learn) the poem by Byron.
4. When Elizabeth came home yesterday she saw that her little sister (to break) her favorite doll.

Task 40. Put the verbs in brackets into the Future Perfect Tense:

1. By Christmas they will have sold (sell) over five million cards.
2. By this summer the city council (spend) \$2 million on redecorating the old town.
3. By 2030 the climate in Europe (become) much warmer.
4. By the end of this decade our town (invest) \$1 million in the tourist industry.
5. By the next Olympic Games many records in sport (be) broken.
6. By the time scientists find a cure for AIDS, many thousands of people (die).

Task 41. John is a promising young scientist. Use the cues and the Future Perfect Tense to predict his achievements in the future.

- 1) by 2020/ publish eleven books
By the 2020 he will have published eleven books.
- 2) by the end of decade / discover a treatment that can cure all kinds of cancer
- 3) by the time he's thirty-five / become a professor
- 4) by the end of his career / receive several honorary doctorates from famous universities
- 5) by the end of next year / finish writing his PhD
- 6) by 2010 / write a book about genetically transmitted diseases
- 7) by next summer / be to fifteen conferences
- 8) by 2015 / do a lot of research on cancer

Task 42. Fill in the question tags.

1. MIDI doesn't transmit any sound,?
2. You can create your own compilation,?
3. John started an e-commerce operation,?

4. Enter your credit card number,?
5. No one shops on the Internet,?
6. Don't enter your password,?
7. Cybernetics studies the way information is moved and controlled by the brain or by machinery,?
8. Let her insert the floppy disk into the disk drive,?
9. I've lost a lot of data,?
10. We have never visited any home pages of pop stars or film stars,?
11. The server was down,?
12. Our computer has a virus,?
13. The boy tried to hack into the system,?
14. Source code is important,?
15. The money is yours,?
16. Let's add more memory to our computer,?
17. There are a lot of advantages to this approach,?
18. I haven't got much feedback,?
19. There were no other folders,?
20. We'll never have an intelligent computer,?

Task 42. Simple Future, Future Continuous, Future Perfect, or Future Perfect Continuous? Choose the right answer.

1. I'm sure that he.....you.

a) will help	b) will be helping	c) will have helped	d) will have been helping
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2. She.... when you come back.

a) will sleep	b) will be sleeping	c) will have slept	d) will have been sleeping
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3. I you in the morning.

a) will call	b) will be calling	c) will have called	d) will have been calling
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4. I at 11:30 tomorrow.

- a) will work b) will be working c) will have worked d) will have been working

5. I think that we to Italy next summer.

- a) will go b) will be going c) will have gone d) will have been going

6. You will recognize him. He a brown leather jacket and a red scarf.

- a) will wear b) will be wearing c) will have worn d) will have been wearing

7. Say goodbye to Ann. By the time you return, shefor New York.

- a) will leave b) will be leaving c) will have left d) will have been leaving

8. She buys too many things. She all her money long before her next pay.

- a) will spend b) will be spending c) will have spent d) will have been spending

9. By 2014, he as the director of this company for thirty years.

- a) will work b) will be working c) will have been working d) will have worked

10. She him about it.

- a) won't tell b) won't be telling c) won't have told d) won't have been telling

Task 43. Put the verb in brackets into the correct form

1. The instructions (to be recorded) in the order in which they are to be carried out.

2. Many new branches of industry (to be developed) in our country since World War II.

3. The concept of the stored program (to be worked out) by J. Neuman in 1945.

4. The constituent parts of the computer (to be called) hardware.

5. A new program (to be compiled) when I came.

6. All these calculations (to be done) by 5 o'clock yesterday.
7. The information (to be collected) by the end of the next week.
8. This examination (to be taken) tomorrow.
9. Your papers (to be typed) now. Wait a minute.
10. A new input device (to be discussed) when we came.
11. A new model of the printer (to be shown) tomorrow.
12. Microcomputers (to be applied) since the 1970s.
13. Only one branch of a program (to be selected) on each occasion.
14. "Connector" symbols (to be used) to show the exit to or the entry from another point in the same flowchart

Task 44. Use Present Passive Simple in the following informative text to describe the processes and events.

Production of Crisps

Crisps _____(make) from potatoes. The potato was discovered in Peru in the 16th century and brought to Europe by the Spanish. Crisps were invented in the United States. More crisps _____(eat) today in America than in any other country. But, in fact, they _____(not call) crisps in America. They _____(call) chips. How they _____(make)?

The potatoes _____(grow) and they _____(dig up), _____(put) into sacks and _____(take) to the factory. There the potatoes _____(wash), _____(peel) and _____(slice). The slices of potatoes _____(cook) in hot vegetable oil. The cooked crisps _____(take) to the packing machine. Then flavorings and salt _____(add). The crisps _____(put) into packets and the packets _____(put) into boxes. Then the boxes _____(send) to shops, cafes and pubs.

Task 45. **Fill in the blanks with the prepositions *by* or *with*.**

1. The boat was carried _____ the waves into the open sea.
2. The teacher was pleased _____ our work.
3. America was discovered _____ Columbus.
4. "Hamlet" was written _____ Shakespeare.
5. Soup is eaten _____ a spoon.
6. He was knocked down _____ a big stick.
7. He was knocked down _____ a car.
8. He was taken to hospital _____ an ambulance.
9. He was treated _____ very effective drugs.
10. He was cured _____ a very skillful doctor.
11. The letter was written _____ a pencil.
12. He was scolded _____ his mother.

Task 46. **Put the verbs in correct form, Present Simple or Past simple, Active or Passive.**

1. Water _____ (cover) most of the earth's surface.
2. How much of the earth's surface _____ (cover) by water?
3. The park gates _____ (lock) at 6.30 p.m. every evening.
4. The letter _____ (post) a week ago and it _____ (arrive) yesterday.
5. The boat hit a rock and _____ (sink) quickly. Fortunately everybody _____ (rescue).
6. Richard's parents _____ (die) when he was very young. He and his sister _____ (bring up) by their grandparents.
7. While I was on holiday, my camera _____ (steal) from my hotel room.
8. While I was on holiday, my camera _____ (disappear) from my hotel room.

9. I saw an accident last night. Somebody _____ (call) an ambulance but nobody _____ (injure), so the ambulance _____ (not / need).

10. _____ (somebody / clean) this room yesterday?

Task 47. Use Future Simple Passive to complete the following instructions and advertisements.

a. An Essay Competition: Rules

1. The competition --will be held (hold) on October, 15.

2. Entry forms and essays (must arrive) not later than 30th September.

3. All essays _____ (examine) by a panel of judges.

4. All essays become the property of *The Londoner* and _____ (not to return).

5. All prize winners _____ (notify) by post.

6. First prizes winners and their entries _____ (publish) in the November edition of *The Londoner*.

7. Prizes _____ (award) in London on 15th December.

8. Winners _____ (invite) to a presentation ceremony and gala dinner.

Task 48. Use present or Future Simple Active or Passive to complete the following sentences.

1. After six months his salary _____ (raise).

2. The examiner _____ (read) the passage three times before he _____ (give) it to the students.

3. Don't worry! You _____ (arrive) to the airport in time.

4. Your breakfast _____ (take up) to your room tomorrow morning.

5. The TV-set doesn't work now but it _____(mend) soon.
6. This program is going to be interesting. Millions of people _____(watch) it on Friday.
7. I am sure somebody _____(meet) you at the station.
8. The luggage _____(inspect) by the customs officers.
9. The thief _____(put) in prison after the trial.
10. United definitely _____(win) tonight.
11. The workmen have a holiday today. The work _____(finish) tomorrow.
12. The match _____(play) on Wednesday evening.
13. A number of political prisoners _____(release) within the next few months.
14. When I _____(see) her I _____(tell) her the whole story.
15. The prices _____(rise) again this month.

Task 49. Put the verbs in brackets into Present or Past Continuous Active or Passive.

1. There are no doors. They _____(paint).
2. The house _____(redecorate) when I arrived
3. The workers _____(make) our street one-way
4. This type of computers now _____(manufacture) in many European countries.
5. He _____(drive) at over 100 kilometers when the accident happened.
6. When I left the laboratory, the lab assistant still _____(test) the device.

7. We couldn't ride that way because the road _____(widen).
8. The countries _____(compete) with each other to build the tallest building.
9. Ann can't use her office at the moment. It _____(redecorate).
10. The photocopier broke down yesterday, but now it's OK. It _____(work) again.

Task 50. Choose Present Perfect or Past Simple Active or Passive.

1. When it became clear that he would be moving to Austria, he _____(sell) the house to his brother.
2. All the copies of the book already _____(sell out).
3. _____the car _____(sell) for \$2000 some days ago?
4. The tickets cost too much and _____(sell) badly.
5. Do you know if your neighbors _____(sell) their car?
6. According to yesterday's newspapers, astronomers in Australia _____(discover) a planet in galaxy close to ours.
7. A new planet _____(discover) but I don't remember its name.
8. Radium _____(discover) by Pierre and Marie Curie.
9. His father _____(receive) so many complains about the noise that he told Chris to sell his drums.
10. Over 50 letters of support _____(receive) in the last 10 days.
11. His project _____(receive) a lot of attention lately.

Task 51. The environment: what can be done to make the Earth a safer and better place?

1. We should clean up the air. The air should be cleaned up.

2. We should protect animals in danger.

3. We could use more solar energy.

4. We shouldn't treat food with chemicals.

5. We must find ways to prevent oil spills.

6. We shouldn't use products which damage the ozone layer.

7. We mustn't put waste into seas and rivers.

8. We must change people's attitude towards the environment.

9. Governments ought to make tough laws against litter.

10. We can save more energy and water.

11. We should ban cars which use leaded petrol.

12. We ought to stop cigarette advertising.

Task 52. Use **Reported speech**

1. I don't know where Do you know where ...?

a) is my passport; is it b) my passport is; it is c) was my passport, it was

2. Can you tell me when ... ?

a) does the plane leave b) the plane leaves c) will the plane leave

3. I'd like to find out what... at 7 p.m. yesterday.

a) you were doing b) did you do c) you did

4. Mike said that he ... on us the following week.
- a) called b) will call c) would call
5. John asked the teacher if he ... take ... book.
- a) can; the b) could; that c) could; this
6. Galileo declared that the earth ... around the Sun.
- a) moves b) moved c) had been moving
7. We couldn't understand what....
- a) he meant b) did he mean c) he means
8. The old lady said she didn't remember where
- a) she lives b) did she live c) she lived
9. Jane said that she ... music and ... to become a musician.
- a) loved; is going b) was loving; was going c) loved; was going
10. Sherlock Holmes was wondering if the man ... the cabman what....
- a) said; his name was b) told; was his name c) had told; his name was
11. We ... the child not to do that again.
- a) told b) said c) asked
12. wonder if Peter ... us this afternoon. — Let's wait.
- a) is calling b) calls c) will call
13. Alex says that he ... all his money and ... to buy the tickets.
- a) lost; wouldn't be able b) has lost; won't be able c) lost; can't
14. My brother told me that he would be busy...
- a) tomorrow b) the next day c) the day before
15. I thought you ... you ... to join them at the weekend.
- a) say; are going b) said; would be going c) said; were going
16. Claire told Linda that she wouldn't go to the movies....
- a) last night b) that night c) yesterday evening
17. She mentioned that she ... them before.
- a) hadn't met b) hasn't met c) didn't meet
18. The chief told her ... him as soon as she arrived.
- a) call b) to call c) that she should call
19. My friends inquired whether I knew when the train....
- a) was arriving b) arrived c) will arrive

20. wonder how long ... me to get there.
 a) will it take b) it takes c) it will take
21. The manager ordered ... talking and start working.
 a) stop b) them to stop c) to stop
22. We asked the teacher ... leave our exercise-books on his desk.
 a) whether to b) B if to c) whether we should leave
23. The lawyer wanted to know since when my parents....
 a) are married b) have been married c) had been married
24. The coach advised the sportsman ... about his health.
 a) that he was more careful b) that he is more careful c) to be more careful
25. He wondered why ... to my parents about my arrival.
 a) haven't I written b) I haven't written c) I hadn't written
26. They warned Jack ... there, but he would have his way.
 a) not to go b) against going c) that he does not go
27. The teacher remarked that we ... make very good reports if we wanted to.
 a) can b) could c) ought to
28. You haven't told me what you ... to do now.
 a) were going b) wanted c) are going
29. He asked us if we ... help him the following day.
 a) would be able to b) can c) may
30. Our friends said that the taxi was there and we ... use it.
 a) may b) had to c) could
31. She said that at six o'clock she ... for eight hours.
 a) will be working b) would work c) would have been working
32. The boss said that he ... speak to David.
 a) must b) had to c) may
33. What did the students say ...? — They wanted to go to the lecture.
 a) did they want b) they wanted c) they want
34. Frank ... Mary that she ... to go to the doctor's.
 a) said; ought b) said to; must c) told; ought

Task 53. Put the verbs in brackets into the correct forms.

1. If you pass your examination we (have) a celebration.
2. What (happen) if I press this button?
3. You would play better bridge if you (not talk) so much.
4. If I had known that you couldn't eat meat I (not buy) it.
5. If you go to Paris where you (stay)?
6. If someone offered to buy you one of those rings, which you (choose)?
7. The flight may be cancelled if the fog (get) thick.
8. If you (read) the instructions carefully you wouldn't have answered the wrong question.
9. If the milkman (come), tell him to leave two pints.
10. If you were made redundant what you (do)?
11. Someone (sit) on your glasses if you leave them there.
12. You (not have) so many accidents if you drove more slowly.
13. If you (wear) a false beard nobody would have recognized you.
14. I could repair the roof myself if I (have) a long ladder.
15. I'll probably get lost unless he (come) with me.
16. If she (leave) the fish there the car will get it.
17. You'll get pneumonia if you (not change) your wet clothes.
18. She (be able) to walk faster if her shoes hadn't such high heels.
19. I (bring) you some beer if I had known that you were thirsty.
20. If the story hadn't been true the newspaper (not print) it.

Task 54. Put the verbs in brackets into the correct forms.

1. The ship would have run aground if the pilot (make) one mistake.
2. I shouldn't have taken your umbrella if I (know) that it was the only one you had.
3. If I have enough apples, I (bake) an apple pie this afternoon.
4. If I had enough apples, I (bake) an apple pie this afternoon.
5. If I had had enough apples yesterday I (bake) an apple pie.

6. If the weather is nice tomorrow, we (go) to the zoo.
7. If the weather were nice today, we (go) to the zoo.
8. If the weather had been nice yesterday, we (go) to the zoo.
9. It's too bad Helen isn't here. If she (be) here, she (know) what to do.
10. Fred failed the test because he didn't study. However, if he (study) for the test, he (pass) it.
11. You should tell your father exactly what happened. If I (be) you, I (tell) him the truth as soon as possible.

Task 55. Translate these sentences into English

1. Ми працювали в офісі у той час, коли приїхали гості з Франції.
2. Ми експортували цей вид товарів у прошлому році.
3. Секретар сканувала документи, коли прийшов директор.
4. Вони взяли на роботу 14 робітників у 2003 році.
5. Менеджер з наукових розробок вивчав цю проблему на протязі 2-х місяців.
6. Що ви друкували вчора з 10 до 12 години?
7. Ми обговорювали новий проект на протязі 4-х годин.
8. Цей вчений розробив нову модель комп'ютера в Швейцарії.
9. Як довго ви писали цей доклад?
10. Джек заказав нову партію моніторів вчора.
11. Ми зараз проводимо переговори з фірмою « Майкромедія».
12. Менеджери часто розмовляють по телефону.
13. Що зараз робить ваш дела секретарь? – Вона працює на комп'ютері.
15. Наші фірми тільки що підписали договір на поставку нових периферійних пристроїв.
16. Я думаю, що дуже багато часу проводите за комп'ютером.

TESTS

pointer on optical roll

scroll up scroll down touchpad left button

right button joystick single double

scroll wheel hold down repetitive strain injury

1. _____ to see pages above.
2. _____ to see pages below.
3. To select text, _____ the left button, and move the mouse pointer.
4. If you use a mouse for many hours every day, you can get _____ in your fingers.
5. With a laptop computer, plug in a mouse, or use the _____ in front of the keyboard.
6. To play some games, you need to use a _____ instead of a mouse.
7. To move up and down a page, you can _____ the mouse wheel.
8. This mouse doesn't have a ball. It's an _____ mouse.
9. One click of a mouse button is called a _____ click.
10. Two clicks of a mouse button are called a _____ click.
11. Click _____ the folder to open it.

True or false?

1. Inkjet cartridges can be refilled up to three times. TRUE / FALSE
2. Color images are printed by mixing red, green and yellow ink. TRUE / FALSE
3. "ppm" stands for pages per minute. TRUE / FALSE
4. Most inkjet printers can print out at 100 ppm or more. TRUE / FALSE
5. Inkjet cartridges are very difficult to change. TRUE / FALSE
6. Photo-paper is a lot more expensive than plain paper. TRUE / FALSE
7. Recycled paper is made out of old bottles. TRUE / FALSE
8. Some Inkjet printers have three print qualities: draft, normal and best. TRUE / FALSE

9. Before you can use a new printer, you have to install the driver from a CD-ROM. TRUE / FALSE

10. When a print job has started, it can't be cancelled. TRUE / FALSE

Match the devices with the places you would find them

- 1) cash dispenser / cash machine / ATM
 - 2) barcode reader
 - 3) magnetic strip
 - 4) MP3 player
 - 5) photocopier
 - 6) telex machine
 - 7) video camera
 - 8) mainframe computer
- a) at a supermarket checkout
 - b) connected to a pair of headphones
 - c) in an office in 1975
 - d) in an office, school or copy shop
 - e) in the hands of a tourist
 - f) in the headquarters of a large company
 - g) on the back of a credit card
 - h) outside a bank

9. When you pay by credit card, your card is _____.

- a) swooped b) swiped c) swapped

10. A laptop computer with a screen you can write on is called a _____.

- a) tablet PC b) table PC c) flat screen PC

11. An image on TV or computer screen is made up of thousands of _____.

- a) points b) pixels c) bits

12. You can draw directly onto a computer screen with a _____.

- a) bright pen b) light pen c) pixel pen

13. A camera connected directly to the internet is called _____.

- a) an internet camera b) a web watcher c) a webcam

14. The woman in the photo is wearing a _____.
- a) headpiece b) headphone c) headset
15. She talks to customers on the telephone all day. She works in a _____.
- a) telephone centre b) call centre c) talking centre

1. Scanners, printers and webcams are _____.
- a) Extras b) Peripherhals c) Externals

2. Add extra USB _____ to your computer....
- a) ports b) doors c) windows

3. ... with a USB _____.
- a) centre b) point c) hub

4. ADSL is also known as _____.
- a) wideband b) broadband c) longband

5. I want to get a _____ ADSL modem.
- a) quick-speed b) fast-speed c) high-speed

6. The internet is much faster with a broadband connection than with ____.
- a) dial-up b) phone-up c) call-up

7. With a wireless router, you can _____ your broadband connection with other users.
- a) divide b) combine c) share

8. This wire's too short. I need an _____ cable.
- a) extended b) Extension c) Extender

9. You can connect a USB plug to a PS/2 port by using _____.
- a) an adaptor b) bridge c) connector

Software: the basics

1. Turn on your computer. It will usually take a few minutes to _____.
- a) boot itself b) boot up c) get booted

2. Windows XP, Macintosh OSX and Linux are _____.
- a) operating systems b) operating tools c) operators

3. On my computer, I have a picture of my cat as the _____.
- a) desktop background b) desktop picture c) desktop scene

4. Microsoft Word, Adobe Acrobat and CorelDraw are programs or ____.
- a) applicators b) appliers c) applications
5. To open Microsoft Word, click on the _____.
- a) picture b) symbol c) icon
6. I keep all my digital photos in a _____ called "Photos".
- a) folder b) packet c) box
7. Is it possible to open Microsoft Excel _____ in Word?
- a) texts b) files c) pages
8. In Microsoft Word, to start typing a new letter, open a new _____.
- a) document b) page c) paper
9. When you _____ a document, it's sent to the recycle bin.
- a) destroy b) erase c) delete
10. Deleted documents stay in the recycle bin until you _____ it.
- a) wash b) empty c) clean
11. In Windows, the icon is just a _____ to the application. If you delete the icon, the application will still be on your computer.
- a) connector b) shortcut c) link
12. If the computer crashes, you can try pressing the _____ button.
- a) restart b) recommence c) replay
13. When I've finished using my computer, I always _____.
- a) close it down b) shut it down c) shut it off
14. If I leave my computer on without using it, after a while it goes into _____ mode.
- a) stand down b) waiting c) standby

Some useful verbs

1. To turn on the computer, _____ the "Start" button.
- a) touch b) b. press c) switch
2. The printer has _____ of ink.
- a) finished b) ended c) run out
3. Unfortunately, my scanner isn't _____ at the moment.
- a) working b) going c) doing

4. Please _____ the CD ROM.
 a) insert b) introduce c) inject
5. The projector isn't working because it isn't _____.
 a) plugged b) plugged in c) plugged into
6. The batteries in my digital camera are nearly dead. They need _____.
 a) to change b) exchanging c) changing
7. I have to _____ a computer screen for eight hours a day.
 a) see b) look at c) watch
8. Switch off your computer, and _____ it from the wall socket.
 a) de-plug b) unplug c) non-plug
9. I turned off the photocopier and _____ the plug.
 a) pulled out b) extracted c) took away
10. _____ any key to continue.
 a) Kick b) Smash c) Hit
11. TV and computer screens are usually measured in _____.
 a) feet b) miles c) inches
12. Before you start work, _____ the height of your chair
 a) adjust b) change c) rearrange
13. To get sound from your computer, plug in a pair of _____.
 a) loudhailers b) loudspeakers c) loud voices
14. The computer is connected to the telephone line via a _____.
 a) module b) modem c) mod
15. You can increase the functions or performance of a computer with an _____.
 a) extension card b) exploding card c) expansion card
16. Mobile phones and PDAs can communicate with computers via _____.
 a) Bluebeard ® b) Blueberry ® c) Bluetooth ®
17. There's a spare _____ in the workstation...
 a) electric hole b) power point c) electrical opening
18. ...so you can plug in your mobile phone _____.
 a) charger b) power c) electrification
19. SD cards can be read in a computer's _____.
 a) storage reader b) memory reader c) card reader

Some useful adjectives

1. Oh dear. I pressed the _____ button.
a) . incorrect b) wrong c) false
2. I can't use my mobile phone. The battery's _____.
a) over b) flat c) exhausted
3. The battery isn't completely flat, but its very _____.
a) down b) short c) low
4. My video camera is very _____.
a) easy to use b) uncomplicated c) obvious
5. My new computer has a very _____ processor.
a) quick b) high speed c) fast
6. The X19 notebook computer features a very _____ design.
a) compact b) little c) small
7. Keeping files on paper is _____ solution.
a) an old-tech b) a past-tech c) a low-tech
8. Keeping files on a computer database is a _____ solution.
a) new-tech b) now-tech c) . high-tech
9. My new PDA is the _____ model.
a) latest b) newest c) most modern
10. In our office, we've set up a _____ network.
a) wire-free b) no wires c) wireless
11. A call from New York to Tokyo is _____ distance.
a) far b) long c) faraway
12. I don't think this printer is _____ with my computer.
a) compatible b) connectable c) suitable
13. My laptop is only 3 centimeters _____.
a) thick b) tall c) wide
14. The screen on my laptop isn't very _____.
a) light b) white c) bright
15. In three or four years, my new computer will probably be _____.
a) old fashioned b) behind the times c) obsolete

16. When you connect this to your computer, it will work immediately.
It's _____.

- a) plug and go b) plug and play c) plug and use

Choose the correct item:

Journalist: – Everybody 1... the Internet 2... really exciting. But what exactly 3... the Internet?

Mr. Morgan: – Well, it 4... a global network, which 5... users to share all sorts of information and computer resources. The system 6... networks interconnected all over the world, from universities and large corporations to commercial online systems and non-profit organizations.

Journalist: – And how 7... you connect yourself up to the Internet?

Mr. Morgan: – Well, you just need a PC, a modem and a telephone line. Not a lot really.

Journalist: – And 8... it easy to install a modem?

Mr. Morgan: – Oh yes. You just 9... one cable of the modem to the communications ports of the computer and the other to the telephone line.

Journalist: –Right. And I 10... you need special software to get online.

Mr. Morgan: – Yes, that's right. You need telecommunications software and you have to set up an account with an Internet service provider.

Journalist: – And what 11... the Internet offer?

Mr. Morgan: – It 12... services such as e-mail, file transfer, newsgroups, real-time chats and information retrieval on the World Wide

Web.

Journalist: – And what 13... the Web?

Mr. Morgan: – The Web 14... a huge collection of “pages” stored on computers all over the world. Web pages 15... all sorts of information in the form of text, pictures, sounds and video. They also 16 ...links to other resources on the net.

Journalist: – Ok, right. Thanks very much, Mr. Morgan. You've been very helpful.

- | | | |
|-------------------|-------------|------------------|
| 1. a) say | b) says | c) doesn't say |
| 2. a) Is | b) does | c) are |
| 3. a) are | b) is | c) isn't |
| 4. a) are | b) does | c) is |
| 5. a) allow | b) allows | c) doesn't allow |
| 6. a) to comprise | b) comprise | c) comprises |
| 7. a) are | b) do | c) does |
| 8. a) does | b) do | c) is |
| 9. a) connect | b) connects | c) don't connect |
| 10. a) imagines | b) imagine | c) don't imagine |
| 11. a) do | b) does | c) is |
| 12. a) offers | b) offer | c) doesn't offer |
| 13. a) are | b) does | c) is |
| 14. a) am | b) is | c) are |
| 15. a) contain | b) contains | c) don't contain |
| 16. a) has | b) have | c) do |

Test 1

Choose the correct item:

- Virtual reality _____ let you travel to places you've never been to.
a) can not b) can c) will not
- _____ computers consist of one or more functional devices.
a) all b) neither c) none
- I use the Internet to e-mail my tutor if I have ____ problems with my course work.
a) no b) any c) some
- An operating system acts directly on the raw hardware of the computer. _____ supports other layers of software. 88
a) its b) she c) it

19. I _____ a computer program which checks my spelling for me.
 a) have b) am having c) has got
20. Look! _____ machines look exactly like humans!
 a) this b) these c) those
21. A mouse is _____ very efficient device for desktop navigation.
 a) the b) a c) –
22. If one system produces more errors than _____, it is obviously inferior.
 But which type of error is _____? It requires _____ work to find out which.
 a) another, worse, a b) other, worse, c) others, the
 lot more much worse, more
23. We had to link the motherboard and the CPU and all _____ components of a computer and make it run.
 a) others b) the other c) another
24. There _____ to stop you having more than one free ISP account.
 a) isn't something b) is nothing c) nothing
25. _____ expert system cannot have _____ common sense. 90
 a) the, the b) –, a c) an, –
26. Ergonomics is the study _____ human factors related _____ computers.
 a) of, to b) of, with c) for, for
27. Problems with too _____ rules (more than 10000) are too complex.
 a) much b) a lot of c) many
28. An expert system is no _____ than an expert.
 a) more good b) better c) good
29. I don't know which key to press. I _____ a clue.
 a) have to b) am not having c) haven't got
30. _____ changes are already under way, and _____ pace accelerates every year.
 a) this, there b) that, its c) these, their
31. Little children _____ spend too much time on their PCs.
 a) mustn't b) may c) must

32. You can use _____ dictionaries during the test.
a) your b) yourself c) yours e
in the film (there are many games).
33. The first game is a fighter simulator. _____ is based on a sequence
a) the other b) another c) other
34. When a brand new computer comes off the factory assembly line, it
can do _____.
a) everything b) anything c) nothing
35. My computer sometimes stops and reboots _____.
a) it b) itself c) its
36. ____ a lot of work out for people who know Visual Basic, C++ and so
on.
a) there's b) there are c) their`s
37. _____ expert system can serve well as _____ consultant or
_____ specialist in _____ absence of _____ human consultant.
a) the, the ,the, the b) an ,a, a, an, a c) an, a , -, the ,a
38. _____ modern times , most information-processing machines were
designed to do arithmetic.
a) until b) during c) at
39. _____ people today telecommute – that is, use _____ computers to
stay in touch with the office while they are working at home.
a) much ,its b) many, their c) more, theirs
40. When the chip arrived, it reduced even _____ the size of computers
while increasing their speed.
a) farther b) far c) further
41. Networks are available for people to access data and communicate
with _____.
a) the other b) others c) another
42. _____ can have the source code – it's free.
a) no one b) anyone c) any
43. Pam spends all _____ free time playing computer games.
a) his b) hers c) her

44. Viruses _____ an area of pure programming.

- a) is b) are c) aren't

45. Similarly, _____ disabled can communicate more effectively with _____ others using _____ computers.

- a) the, -, - b) -, the, the c) a, the, the

46. A computer that was modern _____ conception was designed _____ the 1830s.

- a) in, in b) in, about c) in, at

47. You _____ get an advanced certificate before you _____ call yourself a Microsoft Certificate Professional.

- a) A must, can b) can, must c) are able, must

48. The mainframe, on _____ hand, can handle large numbers of queries and return results to the users.

- a) another b) other c) the other

49 I had _____ problems, but not too _____.

- a) no, many b) some, many c) any, much

Test 2

Choose the correct item:

1. Individual businesses require information according to the nature of _____ operations.

- a) Their b) its c) her

2. There _____ a set book on support which was useful.

- a) were b) was c) is

3. That device prints seven pages _____ minute.

- a) in a b) after a c) a

4. Lady Lovelace discovered a paper _____ the Analytical Engine written _____ an Italian engineer.

- a) on, by b) about, with c) for, by

5. _____ the robots in use today do jobs that are especially difficult for human worker
- a) a lot of b) many of c) much of
6. We will look _____ closely at software and software applications in other chapters.
- a) even b) as c) much more
7. People usually buy CDs _____ days.
- a) one of these b) these c) on these
8. The quest for information _____ lead to stress.
- a) can b) ought to c) has to
9. Do you have any tips for _____ creating a Webpage?
- a) another b) the other c) others
10. The operator spends _____ his free time controlling the robot and _____ solving the problem.
- a) all, none b) all of, none of c) no, all
11. A consultant often works on very small timescales – _____ days here, a week there.
- a) much b) a few c) a little
12. If _____ parts of the displayed image occupy only one horizontal scan line, the scan will flicker.
- a) none of b) some c) any
13. The Pentagon gets something like 200 attempts a day to break into _____ systems.
- a) its b) theirs c) their
14. About _____ all hacks into company computers are done by current stuff.
- a) 75 per cents of b) 75per cent of c) 75 per cent
15. My _____ if you want to buy things on the Internet, get a separate credit card.
- a) advice is b) advise is c) advices are
16. Most students have _____ paper qualifications and no practical experience.

- a) a b) – c) the

17. Instead _____ clicking on programs you can click on “Run” or your “Start Menu”.

- a) on b) that c) of

18. There are _____ ways to become infected with a virus.

- a) little b) few c) a few

19. _____ there are mistakes in the virus _____ it will be caught.

- a) the more, the quicker b) more, quicker c) the more, the

20. This computer program _____ many interesting features such as a spelling check.

- a) is having b) has c) have got

21. They are Computer Services Engineering Technicians. _____ specialists repair and upgrade computers.

- a) those b) they c) these

22. He warned the keyboarders that the system _____ become overloaded.

- a) might b) should c) may

23. We e-mail _____ almost every day, and can talk live to _____.

- a) every other b) one another c) one the other

24. Check to see if there are _____ restrictions on your use of Web space.

- a) anything b) some c) any

25. I’m teaching _____. I have to do it from books and manuals and by reading PC magazines.

- a) me b) my c) myself

26. There _____ plenty of sites for fans of particular actors.

- a) is b) are c) has been

27. It shows us all _____ files we have within that folder.

- a) – b) the c) both

28. Developers are looking _____ bigger, better test suites to help to keep bugs under control.

- a) for b) at c) on

29. We are one of the few countries to have reduced _____ emissions.

- a) her b) its c) their

30. I am reading an article about the _____ technology.
a) last b) latest c) latter
31. _____ to save your work before you shut down the computer.
a) Don't remember b) Remember c) Remembering
32. _____ software had to be rewritten and _____ programmers had to be retrained.
a) Much, many b) Many, many c) A lot of, much
33. The Pentagon is _____ office in the world.
a) a larger b) the smallest c) the largest
34. Which level of RAID is _____?
a) a faster b) the fastest c) faster than
35. Every day _____ people try to find true love on the Internet.
a) millions b) millions of c)
36. Some industry experts predict that WAP _____ a limited lifespan.
a) will have b) is having c) have
37. Always back up your work on a floppy disk or you _____ lose it.
a) have to b) may C c) must
38. By using _____ a mouse and a speech input, a user can first point to the appropriate paragraph and then say to the computer "Make the bold".
a) all b) either c) both
39. _____ you copy your work from the computer into floppy disk.
a) Make sure b) To make sure c) Don't make sure
40. Everyone using a public key system _____ a public key and a private key.
a) have b) has c) is having
41. The magazines _____ often recommend books to buy.
a) itself b) itselfes c) themselves
42. Economics _____ difficult for people with poor math skills.
a) are b) is c) isn't
43. What is _____ next step ?
a) the b) – c) a

44. A change _____ one module doesn't affect the inner working _____ other modules.

- a) _____ b) of, of c) at, of C in, of

45. Smart machines make life _____ easier and more pleasant.

- a) less b) a few c) a little

46. Spaces between their electronic components can be _____ narrow _____ 2.5 microns, or one twentieth the diameter of a human hair.

- a) such as b) as...as c) C soas

47. Electronic money will be very secure but _____ than physical alternatives.

- a) much more versatile b) much versatile c) versatiler

48. Computers save _____ dollars and _____ hours.

- a) a million of, a thousand of b) B millions, thousands c) millions of, thousands of

49. Cheap computer monitors _____ display shades – you get solid black or white.

- a) must b) can't c) should

50. Working together, "man" and "machine" should be able to do things that _____ can do separately. million A none B all C neither

51. Which feature shows other computers networked with _____?

- a) you b) yours c) C your

52. A large number of choices _____ not necessarily a good thing.

- a) is b) are c) do

53. _____ problems suitable for _____ expert systems development include those requiring _____ analysis and _____ synthesis.

- a) The, -, -, - b) , the ,the, the c) -, an, the ,the

54. A properly designed workstation takes _____ account the distance _____ the eyes _____ the screen.

- a) of, between, to b) into, for, to c) into, from, to

55. _____ common sense and the occasional virus scan will help you be virus-free.

- a) a few b) a little c) little

56. Programs compiled in Assembler are ____ and therefore more robust.
 a) much more small b) much smaller c) much more smaller
57. I ____ an Internet connection at the moment.
 a) am having b) have got c) had
58. ____ with more than one program in case you have to use them at work.
 a) Work b) Don't work c) Never work
59. You ____ input data with the keyboard.
 a) can't b) have to c) shouldn't
60. Spray painting is ____ task suited to robots as they don't need to breathe.
 a) other b) the other c) another

Test 3

Choose the correct item:

1. The hardware needs software to make ____ work.
 a) them b) it c) its
2. When you apply for a job, you may be asked to supply a curriculum vitae, which you write ____.
 a) you b) yours c) yourself
3. ____ of my group want to hack.
 a) Neither b) Both c) None
4. You can use XML in your HTML documents to provide metadata, which ____ data about data in the document.
 a) is b) are c) were
5. ____ Kyiv will have two area phone codes. ____ Dnieper River is ____ geographical divider that parts ____ Kyiv into two sectors. ____ first three digits of a seven digit telephone number will change in ____ north of ____ city.
 a) A -, the, a, - b) the,-, the,-, the, c) ,the, the, the
 a ,a

6. Transaction processing systems capture and process internal information, ____ produce the working documents of the business.

- a) Those b) These c) Them

7. A ____ language like C++ would be better.

- a) much up to date b) up to dater c) more up to date

8. In the 1980s, ____ 100,000 LANs were set up in labs and offices around the world.

- a) at last b) at least c) as little as

9. Vast amount of data ____ transmitted at a very high speed using light signals.

- a) is b) are c) don`t

10. What features are made ____ by code reusability?

- a) quicker b) quicklier c) more quicker

11. The process ____ designing an expert system is quite different ____ the traditional systems development process.

- a) in, from b) of, by c) of, from

12. Of course, you will have ____ chance of recovering your PC if the thief doesn't go online.

- a) a lot of b) little c) few

13. GPRS allows you to send up to ____ information than WAP technology.

- a) ten times more b) as more as ten times c) in ten times more

14. Polymorphism means that instructions are treated ____ by ____ objects.

- a) different, b) differently, c) difference,
different different differently

15. Four ____ ten UK consumers are reluctant to use credit cards for Internet purchases.

- a) in b) with c) out of

Test 4

Choose the correct item:

1. The screen of a PC _____ a good user interface.
a) is providing b) provides c) provide
2. The files _____ since my last backup.
a) had changed b) have changed c) changed
3. There was a power cut while I _____ my computer.
a) . was using b) used c) had used
4. Before IBM set the standard for PCs, software houses _____ different versions of their programs for every make of computer.
a) have written b) had been writing c) had written
5. Speed _____ a major component of user interface.
a) will become b) becomes c) will be becoming
6. When I came, they _____ the question for more than an hour.
a) were discussing b) had been discussing c) had discussed
7. I _____ how this robot works.
a) am not understanding b) don't understand c) doesn't understand
8. Right now we _____ the rate of technical progress every decade.
a) double b) have been doubling c) are doubling
9. I _____ to the site and then downloaded it.
a) had got b) have got c) got
10. I _____ a pre-paid charge card for small purchases. Now I can buy things on the Internet.
a) had bought b) have bought c) bought
11. _____ you _____ your site on a search engine yet?
a) did ...register b) have registered c) do...register
12. By 2025 electronic publishing _____ with traditional publishing.
a) will catch up b) catches up c) will have caught up

13. Hello! I'm from your company. We _____ to test the new system.
a) want b) are wanting c) have wanted
14. When _____ you _____ communication?
a) have ...studied b) did ...study c) did ...studied
15. The UK department of Trade and Industry _____ prey to hackers twice.
a) has been b) was c) have been
16. Multimedia computer systems _____ very fast.
a) improves b) had improved c) are improving
17. People sometimes _____ for money, for criminal purposes or for political purposes.
a) hack b) are hacking c) have hacked
18. In 1939 Aldous Huxley _____ virtual reality and genetic engineering in "Brave New World".
a) has predicted b) had predicted c) predicted
19. I _____ a computer for about two years.
a) have b) have had c) have been having
20. How long _____ your site _____ up?
a) have...been b) was c) has...been
21. Machine translation systems _____ actually. They merely help translators to translate.
a) don't translate b) won't translate c) . didn't translate
22. Personal computers _____ inter A. become B. are becoming C had become
become
23. Speed _____ a major component of user interfaces.
a) will have become b) will become c) becomes
24. I _____ to apply for the post of systems programmer.
a) am wishing b) have wished c) wish
25. The file was reduced after MP3 _____ its work.
a) had done b) have done c) did
26. In five-years time we _____ from the University.
a) graduate b) are graduating c) will have graduated

27. Once the DNS server _____ the IP address, it sends it back to the browser.

- a) found b) has found c) finds

28. We _____ the new 3D graphics regularly.

- a) use b) are using c) will have used

29. Linus Torvalds invented Linux when he _____ Computer Science in Helsinki.

- a) studied b) had been c) was studying
studying

30. I _____ always _____ to upgrade my computer.

- a) have wanted b) wants c) want

31. When _____ you _____ a video e-mail attachment?

- a) have...sent b) did...send c) did...sent

32. Can you give me the service tag number? – Wait a moment. I _____ it up in my database.

- a) am going to look b) looked c) will look

33. I'm tired now. I _____ all day.

- a) have been working b) worked C c) am working

34. Computers _____ messages in the mailbox.

- a) store b) stores c) are storing

35. By 2018 scientists _____ active contact lenses.

- a) develop b) will have developed c) will be developing

36. Color laser printers _____ cheaper so more printing will be done in color.

- a) became b) had become c) are becoming

37. A CCD _____ thousands of phototransistors – one for each pixel in the image.

- a) is containing b) contains c) will be containing

38. The Windows market _____ and there is a demand for good C,C++, Delphi, Java and Visual Basic developers.

- a) booms b) is booming c) boomed

39. Who _____ you Math at school?

a) taught b) has taught c) had taught

40. He ____ for a company providing support services for the last eighteen years.

a) worked b) is working c) has been working

41. What operating systems ____ you ____ now?

a) do...use b) are...using c) personal PCs.
are...been using

42. The packets _____ by different routes before they reached the Web server.

a) traveled b) has traveled c) had traveled

43. I hope: by the age of 30, I _____ big projects.

a) will have run b) run c) am running

44. Professor Warwick _____ currently very important experiments.

a) conducts b) has conducted c) is conducting

45. In March 2000 a Welsh teenager ____ information from more than 26,000 credit card accounts.

a) had stolen b) was stealing c) stole

46. I ____ my data to remain intact.

a) will want b) want c) am wanting

47. I bought this CD duty-free as I _____ back from London.

a) came b) was coming c) had been coming

48. He ____ a better computer system by the end of this year.

a) will have b) will introduce c) is introducing

introduced

49. We _____ a computerized system about 5 years ago, but I'm not happy with it.

a) have introduced b) introduced c) were introducing

50. ____ you ever ____ a problem with a virus?

a) did ... have b) had ...had c) have ...had

51. Computing equipment _____ smaller and more sophisticated.

a) is getting b) are getting c) have got

52. By the time you see him again he ____ a physical security system.

- a) will be installing b) will have installed c) is installing
53. Look! I _____ just_____ the location of my navigation elements.
a) had ... changed b) have ... changed c) changed
54. Babbage_____ the world's first mechanical computer.
a) has invented b) had invented c) invented
55. What is wrong? The machine_____ MIDI sound files. 160
a) isn't playing b) hasn't been playing c) doesn't playing
- 56.He _____ with IBM mainframes for at least two years when he was offered a new job.
a) was working b) worked c) had been working
57. I _____ reading off a computer screen. It's not cheap.
a) am not liking b) don't like c) haven't liked
58. What _____ the difference between computers and humans after 2015?
a) will have been b) is being c) will be
59. The courses in Computer Studies_____ me a lot of experience for the post you are advertising.
a) have given b) gave c) had given
60. I _____ on my project since morning. It's midnight and I _____ 10 pages so far.
a) have worked b) work c) have been working
a) wrote b) have written c) have been writing
61. When he was a schoolboy, Bill Gates_____ programs in BASIC.
a) had written b) wrote c) had been writing
62. Today things _____ faster and faster.
a) were changing b) change c) are changing
63. Ariston _____ a dishwasher, fridge and oven using WRAP early next year.
a) launches b) will have been c) will be
 launching launching
64. _____you ever_____ Dogpile search engine? Yes, I _____ it many times.
a) have.. used b) did... use c) do... use
a) try b) have tried c) am trying

65. Everyone was upset. Somebody _____ into our computer lab and _____ the memory chips from all the PCs.

- a) walked b) was walking c) had walked
a) stole b) steals c) had stolen

66. I _____ of getting extra training.

- a) think b) am thinking c) have thought

67. I _____ all my data after my hard disk _____.

- a) lost b) had lost c) was losing
a) crashed b) had crashed c) has crashed

68. _____ you a computer geek at school?

- a) was b) were c) have been

69. He wondered if she _____ links to other sites.

- a) includes b) has included c) had included

70. Computers _____ up with the power and speed of the human brain in 2050.

- a) will catch b) catch c) are catching

71. He _____ as a Computer Consultant for two years and then he got a post of an IT systems manager.

- a) was working b) . worked c) had worked

72. The amount of information at the fingertips of computer users _____ rapidly.

- a) expanded b) have been c) has been
 expanding expanding

73. He _____ off the main power while the computer _____.

- a) had turned b) turned c) was turning
a) ran b) runs c) was running

74. The phone bill was horrendous as I _____ a lot of time on the computer.

- a) had spent b) have spent c) spent

75. I created the site pretty easily. I _____ to put up a couple of sites before.

- a) tried b) was trying c) had tried

APPENDIX

Plural forms

hat – hats	bus – buses	glass - glasses
boy – boys	box – boxes	bench - benches
country – countries	brush – brushes	match - matches

hero – heroes	HO:	piano - pianos
potato – potatoes		photo - photos
volcano – volcanoes		stereo - stereos
tomato – tomatoes		kilo - kilos
echo – echoes		radio - radios

thief – thieves	wife – wives	HO:	roof – roofs	proof - proofs
leaf – leaves	shelf – shelves		belief – beliefs	serf - serfs
knife – knives	wolf – wolves		chief – chiefs	safe - safes
life – lives	half – halves		gulf – gulfs	cliff - cliffs

man – men	goose – geese	louse - lice
woman – women	mouse – mice	brother - brethren
foot – feet	ox - oxen	
tooth – teeth	child - children	

deer – deer	fish – fish (fishes = kinds of fish)
sheep – sheep	fruit – fruit (fruits = kinds of fruit)
swine - swine	

basis – bases	datum – data
crisis – crises	radius – radii
thesis – theses	formula – formulae/formulas
criterion – criteria	memorandum –
phenomenon – phenomena	memoranda/memorandums

means	a means of transport – various means of transport
series	a television series – many television series
species	a species of birds – different species of birds
crossroads	this crossroads – these crossroads
works (factory)	a gas works – two gas works

Тільки в однині				
linen	progress	money	sugar	behavior
furniture	business	scenery	bread	evidence
knowledge	information	wood	beef	research
advice	trouble	weather	macaroni	trouble
luggage	accommodation	sand	salt	music
baggage	equipment	damage	chaos	spaghetti
permission	traffic	work	justice	luck
rubbish	hair	food	machinery	jewelry

Тільки в однині
news, mumps, measles, economics, mathematics, physics, statistics billiards, dominoes, darts, bowls gymnastics, athletics politics, tactics, optics, ethics

Тільки в множині					
sights	riches	savings	earnings	lodgings	clothes
goods	people	outskirts	stairs	poultry	trousers
sweets	police	slums	scissors	cattle	jeans
arms	contents	wages	spectacles	congratulations	tights

Як в однині, так і в множині				
family	crowd	congress	company	clergy
team	jury	government	crew	gentry

group	public	committee	board
staff	army	audience	delegation

Складні іменники			
brother-in-law	-	brothers-in law	
forget-me not	-	forget-me-nots	
merry-go-round	-	merry-go-rounds	
woman-teacher	-	women-teachers	

Присвійний відмінок (THE POSSESSIVE CASE)

У присвійному відмінку використовуються:

1. імена власні та одушевленні іменники	Jane's friend, the students' tests, women's clothes, Dickens's/Dickens' books, Shakespeare's plays;
2. складні іменники	sister-in-law's marriage
3. Іменники, що визначають час та відстань	a month's holiday, a mile's distance, ten days' rest
4. назви країн, міст, кораблів, а також слова <i>world, country, city, ship</i>	London's theatres, the ship's crew, the country's policy, the world's championship, the city's parks
5. деякі прислівники	yesterday's newspaper, today's talks, tomorrow's meeting
6. назви магазинів, отелів, ресторанів, в яких є імена їх засновників	Selfridge's, Claridge's, Sothby's
7. деякі стійкі словосполучення	at a stone's throw – в двох кроках, for order's sake – завдяки порядку

NOUNS

Іменники можуть бути обчислюваними і необчислюваними.

Не обчислювані іменники (Uncountable Nouns)

У необчислюваних іменників немає форми множини. Наприклад, такі слова як *health, excitement* не можуть вживатися у множині. Ви не можете сказати *healths* або *excitements*.

Після необчислюваних іменників вживається дієслово однини:
Water is liquid.

Необчислювані іменники вживаються без артикля і не можуть вживатися з артиклем *a*

(Не можна сказати *a music, an excitement, a blood*, і не можна казати *the gold, the excitement*).

Перед необчислюваними іменниками ви можете використовувати слова: *her / his / some / any / much / this* і т.д. .:

her excitement, some water, much milk, this friendship.

Багато іменників можуть вживатися і як обчислювані, і як не обчислювані. Зазвичай тоді є різниця у значенні слова. Наприклад, *paper* може означати газету (обчислюється), а може означати папір, на якому можна писати (не обчислюваний):

- *Will you buy me a paper, please?* (= Газета)
- *I bought some paper to write a letter.* (= Матеріал)

До необчислюваних іменників відносять:

- природні явища
- захворювання

- ігри
- мови
- науки

Але більшість з них обчислюються в українській мові і можуть використовуватися у формі множини

darkness, hail, heat, rain, humidity, thunder, snow flu, measles, mumps
billiards, chess, golf, soccer, tennis Chinese, English, French Chemistry,
economics, literature, mathematics, physics Behavior, permission, scenery,
work, bread, trouble, news, weather, chaos, accommodation, information,
progress, travel, baggage, advice, furniture, luggage, traffic

The news is good today.

Ask her and she will give you some good advice. (Ніколи advices)

1) одяг: pyjamas, trousers, scissors, etc.

Your trousers are dirty.

2) інструменти: binoculars, compasses, spectacles, etc.

3) групи людей: police, people, army etc.

В цьому випадку іменник може брати дієслово однини чи множини в залежності від ситуації. Якщо розглядається група людей – множина, якщо єдине ціле – однина.

The team was the best (the team as a group).

The team were all given medals. (Each member).

З виразами відстані, тривалості, кількості грошей і т.д. вживається дієслово однини.

Three miles is a long way.

Nine thousand pounds is too much to spend.

Обчислювані іменники (Countable Nouns)

• Обчислювані іменники – це ті, які можна порахувати. Вони можуть вживатися у множині.

Наприклад: six tables, five lamps, some boys, many ideas.

• Обчислювані іменники в однині ЗАВЖДИ використовуються з артиклями **a, an, the**, займенниками **my, his** і т.д ..

- It was a good idea.
- A boy knocked at the door.
- Do not touch my book. (А не Do not touch book)
- I'm looking for a tennis ball. (А не for tennis ball)
- You should not have broken this cup. (А не have broken cup)

• Ми також використовуємо **a / an**, коли описові слова (прикметники або прислівники) відносяться до іменника:

- She is a very nice girl.
- A cat is an animal.
- This is a very beautiful picture.
- What a lovely house!

Не забувайте ставити **a / an** перед іменниками, що позначають професії:

- My father is a doctor. (А не My father is doctor)
- I always wanted to be a programmer. (А не programmer)

• Обчислювані іменники у множині вживаються без артикля:

- Cats are animals.
- I like oranges.
- Sam has very nice friends.
- Kate has got two dogs.

Some іноді вживається з обчислюваними іменниками у множині.

Some = a number of / a few of (коли ми не знаємо точно, скільки same):

- Some students do not like to go to University. (А не Students do not like to go to University)

- Some films are not worth seeing.

або, коли ми хочемо сказати частина, але не всі.

- Some men like hunting. The days in summer are very nasty but generally the weather is good.

SOME AND ANY; SOME/ ANY + -ONE/ -BODY/ -THING/ -WHERE

Some and **any** визначають декілька, деяка кількість. Можуть використовуватися з обчислюваними іменниками у множині та необчислюваними іменниками.

some/somebody/someone/somewhere	в ствердних реченнях; в проханнях та пропозиціях
any/anybody/anyone/anything/ anywhere	в негативних та питальних реченнях; в реченнях з <i>hardly, barely, scarcely, without</i> ; у значенні «любий, який-небудь»
no/none/nobody/no one/nothing/ nowhere	в ствердних реченнях для виразу заперечення

MUCH, MANY, LITTLE, FEW, A LOT, PLENTY

many, few, a few з обчислюваними іменниками у множині	many/few/a few problems
much, little, a little з необчислювальними іменниками	much/little/a little money/noise

АНГЛІЙСЬКІ ДІЄСЛОВА З ПРИЙМЕННИКАМИ

	Дієслово	Приклад
1	accuse smb. of smth.- обвинувачувати	Professor Smith has been accused of publishing the stolen ideas. – Професор Сміт був обвинувачений у публікації вкрадених ідей.
2	agree with smb. – погоджуватися.	Bert always agrees with his parents. – Берт завжди погоджується зі своїми батьками.
3	agree to smth. – погоджуватися на щось.	Jane didn't agree to her daughter flying to Istanbul. – Джейн не погоджувалася з тим, щоб її дочка летіла до Стамбулу.
4	agree about, (up)on smth. – домовлятися	The students have not agreed on a date for their party. – Студентам не вдалося домовитися про дату проведення своєї вечірки.
5	apply for smth. to smb. – звертатися до когось	She needs to apply for a special permission to reconstruct her house. – Вона повинна звернутися за спеціальним дозволом на реконструкцію свого дому.
6	apply to smb. – торкатися	Do the mentioned rules apply to them? – Згадані правила їх торкаються?
7	apologize to smb. for smth. – вибачатися перед ким-то за щось	Your brother has to apologize to me for his words. – Твій брат повинен вибачитись переді мною за свої слова.
8	ask smb. about smth. –питати про щось	She asked Jane about the news. – Вона спитала Джейн про новини.
9	ask for smth. – просити про щось	She never asks for support. – Вона ніколи не просить підтримки.

10	believe in smth. – вірити у щось	He believes in magic. – Він вірить у магію.
11	belong to smth., smb. – відноситися, належати	These magazines belong to his grandfather. – Ці журнали належать його дідусю.
12	benefit by smth. - отримувати прибуток від чогось, вигравати	Jane could benefit by her nature. – Джейн зміла виграти за рахунок свого характеру.
13	blame smb. for smth. – звинувачувати когось	Patrick blamed his son for breaking the toys of his sister. – Патрик звинувачив свого сина у поломці іграшок сестри.
14	blame smb. on smth. – вважати когось винним у чомусь	Our mother blamed it on my cousin. – Наша матуся вважала винною в цьому мою двоюрідну сестру.
15	boast of smth. – хвалитися чимось	Anna boasted of a new green bag. – Анна хвалилася новою зеленою сумкою.
16	borrow smth. from smb. – взяти на деякий час, запозичити	English has borrowed many words from different languages. – Англійська мова запозичила багато слів з різних мов.
17	care about smth. – піклуватися про щось	You care only about money! – Ти піклуєшся тільки про гроші!
18	care for smth. – доглядати, піклуватися про когось	He doesn't care for his grandparents. – Він не доглядає дідуся та бабусю.
19	complain of / about smth. to smb. – скаржитися на щось	Mary complained to her neighbour about being dismissed from her post. – Мері поскаржилася сусіду на усунення її із займаної посади.
20	concentrate (up) on smth. – концентруватися на чомусь	The pupils must concentrate on their work during the lessons. – Школяри повинні концентруватися на їх роботі під час уроків.

21	conform with / to smth. – підчинятися правилам	Your relatives don't want to conform to the rules of our village. – Твої родичи не хочуть підчинятися нашим селешним правилам.
22	congratulate smb. on smth. – поздоровляти когось з чимось	They congratulated their guide on his jubilee. – Вони поздоровили свого гіда з його ювілеєм.
23	consist of smth., smb. – складатися	The new group will consist of twenty people. – Новая група буде складатися з двадцяти людей.
24	depend on smth., smb. – залежати	Her daily expenses depend on travel distances. – Її коженденні розтррати залежать від відстані, яку вона проїзжає.
25	depend (up)on smb. – сподіватися	She depends on her husband telling her everything he knows. – Вона сподівається на те, що її чоловік розповість їй усе, що знає.
26	deprive smb. of smth. – лишати	His children were deprived of the games in the open air. – Його діти були позбавлені гри на свіжому повітрі.
27	die of smth. – вмерти від чогось	People often die of unknown diseases. — Люди часто вмирають від невідомих захворювань.
28	explain smth. to smb. – роз'яснити	She explained her attitude towards this unpleasant experience to the office manager. – Вона об'яснила своє відношення до цієї неприємної події керівнику офісу.
29	fail in smth. – завалити (екзамен)	I think I fail in psychology. – Думаю, що я завалю (= не здам) психологію.

30	insist on smth. – наполягати	His sister insisted on her innocence. – Його сестра наполягала на своїй невинності.
31	listen to smth., smb. – слухати	The visitors listened to the classical music. – Відвідувачи слухали класичну музику.
32	look at smth. – дивитись на щось	She looked at her telephone a while. – Деякий час вона дивилася на свій телефон.
33	look for smb., smth. – шукати	My brother was looking for a new bike for his son. – Мій брат шукав нову веломашину для свого сина. She helped him look for his newspaper. – Вона допомогла йому знайти його газету.
34	look after smb. – дивитися за кимось	He has to look after his sick dog. – він повинен дивитися за своєю хворою собакою.
35	pay smb. for smth. – платити	Ray wanted to pay the children \$5 for washing his dirty car. – Рэй хотів заплатити дітям п'ять доларів за те, що вони помили його грязну машину.
36	play for smth., smb. – грати за когось	What country will you play for in the next match? – За яку країну ти будеш грати у наступному матчі?
37	prefer smb., smth. to smb., smth. – віддавати перевагу	I prefer mineral water to other drinks. – Я віддаю перевагу мінеральній воді, а не іншим напоям.
38	protect smth., smb. from / against smth. – захищати	This beach umbrella will protect your child from the sun. – Ця пляжна парасолька захистить твою дитину від

		сонця. Such food will never protect you against vein disease. – Така їда ніколи не захистить тебе від венозного захворювання .
39	provide smb. with smth. – снабжати, забезпечувати	Such projects provide many people of this town with work. – Такі проекти забезпечують багатьох мешканців цього міста роботою.
40	provide smth. for smb. – забезпечувати, надавати	This small hotel provides laundry service for the guests. – Цей маленький готель надає гостям услуги пральні.
41	regard smb., smth. as – вважати	Edith is regarded as an eccentric girl. – Едіт вважають ексцентричною дівчиною.
42	rely on smth., smb. – покладатися	They always rely on their relatives to help take care of their dogs when they are abroad. – Вони завжди покладаються на допомогу своїх родичів придивитися за їх собаками, коли їдуть за кордон.
43	search for smth. – шукати	It became too dark in the garden to search for lost glasses. – У садку стало дуже темно, щоб продовжувати пошуки загублених окулярів.
44	search smth. for smth. – обшукувати з метою знайти щось	They have searched the railway station for bombs. — Вони обшукували залізничну станцію з метою знайти бомби.
45	spend smth. (time, money) on smth. – витратити. (час, гроші) на щось	Your daughter spends all her time and money on dogs. – Твоя дочка витрачає увесь свій час та гроші на собак.

46	think of / about smth., smb. – думати, розмірковувати	She was thinking about her new post in the office. – Вона розмірковувала про свою нову посаду у офісі.
47	think of /about smth., smb. – думати	What does she think of our new project? –Яка її думка про наш новий проект?
48	translate from smth. into smth. – перекладати	My cousin is translating different texts from Hungarian into Arabic. – Моя двоюрідна сестра перекладає різноманітні тексти з угорської на арабську.
49	wait for smth., smb. – чекати	At that time the people were standing near the bus and waiting for their guide. – У той час люди стояли біля автобуса і чекали свого екскурсовода.
50	warn smb. of / about smth. – застерігати	Bulgarian tourists were warned about the danger of an unknown infection. – Туристи з Болгарії були застережені про небезпеки ураження невідомою інфекцією.

МОДАЛЬНІ ДІЄСЛОВА

Модальні дієслова визначають не саму дію, а відношення до неї.

CAN – можливість що-небудь зробити (можу, вмію)

I can speak Spanish, but I cannot speak Italian.

COULD – у минулому часі.

I could not swim when I was little.

CAN = BE ABLE TO...

Our firm is able to deliver your computers.

MAY —дозвіл (можна), припущення.

You may use my laptop.

May I borrow your book?

It may rain soon.

MIGHT –у минулому часі.

When I was 10, I might walk in the park.

MAY = BE ALLOWED TO....

We were allowed to stay at home.

MUST – необхідність, обов'язок, заборона, припущення

You must work hard.

You must not go there.

It must be cold outside.

HAVE TO – треба (вимушена необхідність)

I did not have to go there.

BE TO – необхідність за домовленістю, наміченим планом.

She is to go to the doctor.

NEED –потрібно

Need I do it?

SHOULD –слід було

You are very pale. You should to go to a doctor.

OUGHT TO – моральний обов'язок

We ought to protect our nature.

ВЖИВАННЯ ЧАСІВ

АКТИВНИЙ СТАН

	Present	Past	Future
Simple	V1 He/she/is V1+s	V-ed or V2	Shall + V1 Will
Continuous	am is + V - ing are	was + V - ing were	Shall be + V-ing Will
Perfect	Have + V-ed or Has V3	V- ed or Had + V3	Shall + have V-ed V3 Will

Present Simple використовується для позначення дії, яка відбувається постійно, звичайно, регулярно. «Сигнальними словами» часу є:

Usually	звичайно
Always	завжди
Often	часто
Seldom	рідко
Sometimes	іноді
Never	ніколи
Every...	кожного....
Regularly	регулярно

Past Simple використовується для позначення дії, яка відбувалась у минулому і не пов'язана з теперішнім часом.

«Сигнальними словами» часу є:

Yesterday	вчора
Day before yesterday	позавчора
Last	минулого
Long ago	давно
5 weeks ago	п'ять тижнів тому
In 1960	у 1960 році
In the XV century	у п'ятнадцятому сторіччі

Future Simple використовується для позначення дії, яка буде відбуватися у майбутньому (зазвичай, це незапланована дія), прогнози та передбачення.

«Сигнальними словами» часу є:

Next	наступний
Tomorrow	завтра
In 2050	у 2050 році
In the XXVI century	у двадцять шостому сторіччі

Present Continuous використовується для позначення дії, яка відбувається під час розмови (тобто прямо зараз).

«Сигнальними словами» часу є:

Now	зараз
At the moment	у цей момент
Today	сьогодні

Past Continuous використовується для позначення дії, яка відбувалась у минулому у визначений час, проміжок часу, або на фоні іншої дії.

When we came home, children were sleeping.

Future Continuous використовується для позначення дії, яка буде відбуватися у майбутньому у визначений час, проміжок часу, або на фоні іншої дії.

They will be the English test from 10 till 12 o'clock tomorrow.

Present Perfect використовується для позначення дії, яка відбулася та пов'язана з теперішнім часом.

«Сигнальними словами» часу є:

Just	тільки що
Already	вже
Yet (-)	ще
Yet (?)	вже
Ever	коли небудь
Never	ніколи

Використовуються з цим часом

Since	з, з тих пір
For	на протязі

Past Perfect використовується для позначення дії, яка відбулася у минулому, раніше другої дії, що теж відбулася у минулому. (Дія, що відбулася логічно першою – *Past Perfect*, дія за нею – *Past Simple*).

She had decorated her flat before her friends arrived.

Future Perfect використовується для позначення дії, яка відбудеться у майбутньому до визначеного часу.

We shall have moved in our new flat by the year end.

ПАСИВНИЙ СТАН

	Present	Past	Future
Simple	am is + V - ed V3 are	was + V - ed V3 were	Shall be + V-ed Will V3
Continuous	am is being + V - ed V3 are	was being + V - ed V3 were	-
Perfect	Have been + V-ed Has V3	Had been + V3	Shall have been + V-ed Will V3

Пасивний стан відрізняється від активного стану тим, що підмет у активі сам виконує дію, а у пасиві над підметом виконується дія.

That computer was tested yesterday.

While John's car was being repaired, my car was being tested.

They have not been given access the Internet.

УМОВНІ РЕЧЕННЯ

Типи умовних речень	Головне речення	Умовне речення (IF)	Використання
1	Shall + V1 Will	V1 He/she/i V1+s	Використовується для реальних дій у майбутньому
2	Would + V1	V-ed or V2 (be= тільки were)	Використовується для реальних дій у теперішньому та майбутньому часах
3	V-ed Would have + V3	V-ed or Had + V3	Використовується для нереальних дій у минулому
0	V1 He/she/i V1+s	V1 He/she/i V1+s	Використовується, коли дія є істиною.

Приклади:

1. Якщо завтра не буде дощу, ми підемо у парк.

If it does not rain we shall go to the park tomorrow.

На твоєму місці, я не купувала той комп'ютер.

If I were you I would not buy that computer.

2. Ми приїхали б до вас на вихідні, як би мали няню.

We would have gone to you, if we had had a babysitter

3. Вода замерзає, якщо температура повітря падає нижче нуля.

Water freezes if the air temperature falls below zero.

DO AND MAKE

MAKE використовується, коли мова іде про створення чогось, про творчість або конструювання.

I cut out the pieces, but she made the model all by herself.

I made some fresh coffee and gave her a cup.

MAKE також використовується з відповідними іменниками, коли ми говоримо про дію, яку виконує інша особа.

Try not to make a noise.

Наприклад:

make arrangements for	The collage can make arrangements for students with special needs.
make a change / changes	The new director is planning to make some changes.
make a choice	John had to make a choice between his career and his family.
make a comment / comments	Would anyone like to make any comments on the talk?
make a contribution to	Jill made a useful contribution to the discussion.
make a decision	I'm glad it's you who has to make the decision, not me.
make an effort	Jan is really making an effort with his maths this term.
make an excuse	I'm too tired to go out. Let's make an excuse and stay at home.
make friends	Jane is very good at making friends.
make an improvement	Decorating the room has really made an improvement
make a mistake	They've made a mistake in their tests.
make a phone calls	I've got to make some phone calls before dinner.
make progress	Mary is making progress with all her work.

З **make** використовуються ще такі іменники, як an announcement, an application, an attempt, a difference, a discovery, an enquiry, a habit of doing something, a list, a journey, money, a plan, a point, a promise, a remark, a sound, a speech, a suggestion.

DO використовується, коли ми говоримо про виконання якоїсь дії.

I always do my homework in the evening.
Jill does the shopping every Sunday.

Наприклад:

do your best	All that matters in the exam is to do your best.
do damage	The storm did some damage to our roof.
do an experiment	We are doing an experiment to test how the metal reacts with water.
do exercises	We'll do some exercises practising these collocations tomorrow.
do someone a good turn/ do someone a favour	Scouts and guides are supposed to do someone a good turn every day.
do harm	Changing the rules may do more harm than good.
do your hair	No, I'm not ready. I haven't done my hair yet.
do your homework	My son has to do his homework straight after school.
do the ironing/ shopping/ washing, etc.	I'll do the washing if you do the ironing.
do some work	We'll do some work on our project and then we'll go to the cinema.

Таблиця неправильних дієслів

VERB	PAST SIMPLE	PAST PARTICIPLE	ПЕРЕКЛАД
be [bi:]	was [wɔz], were [wɜ:]	been [bi:n]	бути
beat [bi:t]	beat [bi:t]	beaten ['bi:tn]	бити
become [bi:kʌm]	became [bi:keim]	become [bi:kʌm]	ставати
begin [bi'gin]	began [bi'gæn]	begun [bi'gʌn]	починати
bleed [bli:d]	bled [bled]	bled [bled]	кровити
blow [blou]	blew [blu:]	blown [bloun]	дути
break [breik]	broke [brɔk]	broken ['brɔk(e)n]	ламати
bring [brɪŋ]	brought [brɔ:t]	brought [brɔ:t]	приносити
build [bild]	built [bilt]	built [bilt]	будувати
burn [bɜ:n]	burnt [bɜ:nt]	burnt [bɜ:nt]	горіти
burst [bɜ:st]	burst [bɜ:st]	burst [bɜ:st]	розірвати
buy [bai]	bought [bɔ:t]	bought [bɔ:t]	купляти
catch [kætʃ]	caught [kɔ:t]	caught [kɔ:t]	ЛОВИТИ, ПІЙМАТИ, ВСТИГНУТИ
choose [tʃu:z]	chose [ʃəuz]	chosen [tʃəuz(ə)n]	вибирати
come [kʌm]	came [keim]	come [kʌm]	приходити
cost [kɔst]	cost [kɔst]	cost [kɔst]	поштувати
creep [kri:p]	crept [krept]	crept [krept]	повзти
cut [kʌt]	cut [kʌt]	cut [kʌt]	різати
do [du:]	did [did]	done [dʌn]	робити
draw [drɔ:]	drew [dru:]	drawn [drɔ:n]	малювати

dream [dri:m]	dreamt [dremt]	dreamt [dremt]	мріяти, дрімати
drink [drɪŋk]	drank [dræŋk]	drunk [drʌŋk]	пити
drive [draiv]	drove [drouv]	driven ['drivn]	вести
eat [i:t]	ate [et]	eaten ['i:tn]	їсти
fall [fɔ:l]	fell [fel]	fallen ['fɔ:lən]	падати
feed [fi:d]	fed [fed]	fed [fed]	годувати
feel [fi:l]	felt [felt]	felt [felt]	почувати
fight [fait]	fought [fɔ:t]	fought [fɔ:t]	боротися
find [faɪnd]	found [faund]	found [faund]	знаходити
fit [fit]	fit [fit]	fit [fit]	підходити за розміром
fly [flai]	flew [flu:]	flown [floun]	літати
forget [fə'get]	forgot [fə'gɒt]	forgotten [fə'gɒt(ə)n]	забувати
forgive [fo'giv]	forgave [fo'geiv]	forgiven [fo'givn]	прощати
freeze [fri:z]	froze [frouz]	frozen ['frouzn]	мерзнути
get [get]	got [gɒt]	got [gɒt]	отримувати
give [giv]	gave [geiv]	given [givn]	давати
go [gou]	went [went]	gone [gɒn]	йти
grow [grou]	grew [gru:]	grown [groun]	рости
hang [hæŋ]	hung [hʌŋ]	hung [hʌŋ]	вішати
have [hæv]	had [hæd]	had [hæd]	мати
hear [hiə]	heard [hɜ:d]	heard [hɜ:d]	чути
hide [haɪd]	hid [hid]	hidden ['hidn]	ховати
hit [hit]	hit [hit]	hit [hit]	вдарити
hold [hould]	held [held]	held [held]	тримати

hurt [hɜ:t]	hurt [hɜ:t]	hurt [hɜ:t]	забитися
keep [ki:p]	kept [kept]	kept [kept]	зберігати
kneel [ni:l]	knelt [nelt]	knelt [nelt]	СТОЯТИ НАВКОЛІШКАХ
know [nou]	knew [nju:]	known [noun]	знати
lay [lei]	laid [leid]	laid [leid]	класти
lead [li:d]	led [led]	led [led]	вести
lean [li:n]	leant [lent]	leant [lent]	наклонятися
learn [lɜ:n]	learnt [lɜ:nt]	learnt [lɜ:nt]	вчити
leave [li:v]	left [left]	left [left]	залишати
lend [lend]	lent [lent]	lent [lent]	брати в займи
let [let]	let [let]	let [let]	дозволяти
lie [lai]	lay [lei]	lain [lein]	лежати
light [lait]	lit [lit]	lit [lit]	світити
lose [lu:z]	lost [lɒst]	lost [lɒst]	загубити
make [meik]	made [meid]	made [meid]	робити
mean [mi:n]	meant [ment]	meant [ment]	значити
meet [mi:t]	met [met]	met [met]	зустрічати
mistake [mis'teik]	mistook [mis'tuk]	mistaken [mis'teik(e)n]	помилятися
pay [pei]	paid [peid]	paid [peid]	платити
prove [pru:v]	proved [pru:vd]	proven [pru:vn]	доказувати
put [put]	put [put]	put [put]	класти
quit [kwit]	quit [kwit]	quit [kwit]	покидати
read [ri:d]	read [red]	read [red]	читати
ride [raid]	rode [roud]	ridden ['ridn]	їздити верхи

ring [riŋ]	rang [ræŋ]	rung [rʌŋ]	ДЗВОНИТИ
rise [raiz]	rose [rouz]	risen ['rizn]	ПІДНІМАТИСЯ
run [rʌŋ]	ran [ræŋ]	run [rʌŋ]	БІГТИ
say [sei]	said [sed]	said [sed]	ГОВОРИТИ
see [si:]	saw [sɔ:]	seen [si:n]	БАЧИТИ
seek [si:k]	sought [sɔ:t]	sought [sɔ:t]	ШУКАТИ
sell [sel]	sold [sould]	sold [sould]	ПРОДАВАТИ
send [send]	sent [sent]	sent [sent]	ВІДСИЛАТИ
set [set]	set [set]	set [set]	ВСТАНОВЛЮВАТИ
sew [sou]	sewed [soud]	sewn [soun]	ШИТИ
shake [ʃeik]	shook [ʃuk]	shaken ['ʃeik(ə)n]	ТРЯСТИ
show [ʃəu]	showed [ʃəud]	shown [ʃəun]	ПОКАЗУВАТИ
shrink [ʃriŋk]	shrank [ʃræŋk]	shrunk [ʃrʌŋk]	ЗМЕНШУВАТИ
shut [ʃʌt]	shut [ʃʌt]	shut [ʃʌt]	ЗАКРИВАТИ
sing [siŋ]	sang [sæŋ]	sung [sʌŋ]	СПІВАТИ
sink [siŋk]	sank [sæŋk], sunk [sʌŋk]	sunk [sʌŋk]	ТОНУТИ
sit [sit]	sat [sæt]	sat [sæt]	СИДІТИ
sleep [sli:p]	slept [slept]	slept [slept]	СПАТИ
slide [slaid]	slid [slid]	slid [slid]	ЗАДВИНУТИ
sow [sou]	sowed [soud]	sown [soun]	СІЯТИ
speak [spi:k]	spoke [spouk]	spoken ['spouk(e)n]	ГОВОРИТИ
spell [spel]	spelt [spelt]	spelt [spelt]	ГОВОРИТИ ПО ЛІТЕРАМ
spend [spend]	spent [spent]	spent [spent]	ВИТРАЧАТИ ГРОШІ, ЧАС
spill [spil]	spilt [spilt]	spilt [spilt]	ПРОЛИВАТИ

spoil [spɔɪl]	spoilt [spɔɪlt]	spoilt [spɔɪlt]	зпортити
spread [spred]	spread [spred]	spread [spred]	розстилати
spring [sprɪŋ]	sprang [spræŋ]	sprung [sprʌŋ]	плигати
stand [stænd]	stood [stu:d]	stood [stu:d]	стояти
steal [sti:l]	stole [stou]	stolen ['stəʊlən]	красти
stick [stɪk]	stuck [stʌk]	stuck [stʌk]	колоти
sting [stɪŋ]	stung [stʌŋ]	stung [stʌŋ]	жалити
sweep [swi:p]	swept [swept]	swept [swept]	мести
swell [swel]	swelled [sweld]	swollen ['swoul(e)n]	розбухати
swim [swɪm]	swam [swem]	swum [swʌm]	плавати
swing [swɪŋ]	swung [swʌŋ]	swung [swʌŋ]	качати
take [teɪk]	took [tuk]	taken ['teɪk(ə)n]	брати
teach [ti:tʃ]	taught [tɔ:t]	taught [tɔ:t]	вчити, навчати
tear [tɛə]	tore [tɔ:]	torn [tɔ:n]	розривати
tell [tel]	told [tould]	told [tould]	розповідати
think [θɪŋk]	thought [θɔ:t]	thought [θɔ:t]	думати
throw [θrəʊ]	threw [θru:]	thrown [θrəʊn]	кидати
understand [ʌndə'stænd]	understood [ʌndə'stʊd]	understood [ʌndə'stʊd]	зрозуміти
wake [weɪk]	woke [wouk]	woken ['wouk(e)n]	прокидатися
wear [weə]	wore [wɔ:]	worn [wɔ:n]	носити
weep [wi:p]	wept [wept]	wept [wept]	плакати
wet [wet]	wet [wet]	wet [wet]	намокнути
win [wɪn]	won [wʌn]	won [wʌn]	вигравати
wind [waɪnd]	wound [waʊnd]	wound [waʊnd]	намотувати
write [raɪt]	wrote [rɔut]	written ['rɪtn]	писати

GLOSSARY

A

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- **Abandonware** – Abandonware refers to software that is no longer being sold or supported by its publisher. Most abandonware is still considered illegal to sell unless the publisher has re-released the software as freeware.
 - **Abstract Base Class** – An abstract base class, a term used in the object oriented programming language, is meant to be used as the base class from which other classes are derived.
 - **Abstract Type** – In software engineering, an abstract type is a type in a nominative type system which is declared by the programmer, and which has the property that it contains no members which also are not members of some declared subtype. In many object-oriented programming languages, abstract types are known as abstract base classes, interfaces, traits, mixins, flavors, or roles. Note that these names refer to different language constructs which are (or may be) used to implement abstract types.
 - **Action Request System** – Action Request System is a Client-server software application toolset developed by Remedy Corp. It is most commonly used as a tracking system. **ActionScript** – ActionScript is a scripting language used in Macromedia Flash. It is similar in syntax to JavaScript.
 - **Active Cell** – Active cell, also called the current cell, is the cell in a spreadsheet (such as Microsoft Excel) in which numbers or formulas can be entered. The active cell shows a thick border, and its name is at the top of the screen.
 - **Active Content** – Active Content is the program code embedded in the contents of a web page. When the page is accessed by a web browser, the embedded code is automatically downloaded and executed on the user's workstation. Active content is either interactive, such as Internet polls or opt-in features, or dynamic, such as animated GIFs, stock tickers, weather maps, JavaScript applications, embedded objects, streaming video and audio or ActiveX applications. Streaming video and audio rely on browser plug-ins, such as RealPlayer, to display active content.

- **Add-in** – Add-in, also known as Add-on, is a mini program that runs in combination with the main application in order to extend and improve the functionality of that application. In the Windows environment, add-ins are becoming increasingly commonly-used Object Linking and Embedding (OLE) technologies.
- **Add-on** – Add-on, also known as Add-in, is a mini program that runs in combination with the main application in order to extend and improve the functionality of that application. For example, there are add-on report generation programs that are attached to popular database products such as dBASE, giving them additional report-generation and graphics capabilities.
- **Algorithm** – Algorithm is a procedure and sequence of actions to accomplish some task. The concept of an algorithm is often illustrated by the example of a recipe, although many algorithms are much more complex; algorithms often have steps that repeat (iterate) or require decisions (such as logic or comparison). In most higher level programs, algorithms act in complex patterns, each using smaller and smaller sub-methods which are built up to the program as a whole. In most languages, they are isomorphic to functions or methods. Most algorithms can be directly implemented by computer programs; any other algorithms can at least in theory be simulated by computer programs.
- **ANSYS** – ANSYS, a product by ANSYS inc. is a software package which used in finite element analysis. Its field of use is large including structural work, electromagnetics, fluid dynamics, thermal analysis, etc.
- **Apache** – Apache is the most popular web server on the Internet with more than 70% of the web sites on the Internet using Apache. The Apache HTTP Server is a project of the Apache Software Foundation and the software is free. Originally designed for Unix servers, Apache has been ported to Windows and other network operating systems (NOS). The name "Apache" was derived from the word "patchy" that the Apache developers used to describe early versions of their software. Apache provides a full range of Web server features, including CGI, SSL, and virtual domains. Apache also supports plug-in modules for extensibility.

- **AppleScript** – AppleScript is an object-oriented shell language and command-line interface for Macintosh, beginning with System 7 Pro.
- **Application Framework** – In computer programming, an application framework refers to a set of libraries or classes that are used to implement the standard structure of an application for a specific operating system. By bundling a large amount of reusable code into a framework, much time is saved for the developer.
- **Application Software** – In computer software, Application software, also known as Application program or simply Application, refers to a complete and self-contained software that helps the user accomplish a specific task. Application programs should be distinguished from system programs such as operating systems, which control the computer and run those application programs.
- **Architecture** – Architecture, in computer software context, is a framework or structure that provides the form of a software system and the conventions, policies, and mechanisms for composing itself with subsystems, or component parts, that can populate the architecture. The architecture defines how the parts relate to each other including constraints governing how they can relate. If a system is divided into parts and components, then there are interfaces that define how the parts intercommunicate or interface.
- **AutoCAD** – AutoCAD, a product of AutoDesk, is a popular computer-aided drafting (CAD) software package for 2D and 3D design and drafting. Initially a general-purpose 2D drafting program, AutoCAD has been extended into a family of products, used by land developers, architects, mechanical engineers, and other design professionals. The AutoCAD family of products, taken as a whole, is by far the most widely used CAD software in the world.
- **Automatic Vectorization** – Automatic vectorization, in the context of a computer program, refers to the transformation of a series of operations performed linearly, one step at a time, to operations performed in parallel, several at once, in a manner suitable for processing by a vector processor.
- **Autoresponder** – Autoresponder, also known as mailbox, is a program that automatically delivers information by e-mail.

- **Autosketch** – AutoSketch is a 2D vector drawing program by Autodesk. AutoSketch software provides a comprehensive set of CAD tools for creating precision drawings from electrical details to floor plans, from conceptual sketches to product specifications, and much more.
- **Autotote** – Autotote is an automated, computerized off-track and/or on-track betting system for betting on horse races. It is an integrated system for off-track betting, keeping track of race results and winning tickets, and race simulcasting.
- **Avidemux** – Avidemux is an open-source free program designed for multi-purpose video editing and processing. It is written in C/C++, using the GTK+ graphics toolkit, and therefore is truly a platform independent, universal video processing program. It is available for almost all distributions of Linux that are capable of compiling C/C++ code, along with the GTK+ graphics toolkit and the SpiderMonkey ECMAScript scripting engine.
- **Avionics Software** – Avionics software is embedded software with legally-mandated safety and reliability concerns, that is used in avionics. The main difference between avionic software and conventional embedded software is that the development process is required by law and is optimized for safety.

B

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- **Backup** – Backup is the process of copying data, software or other digital information on a separate media in addition to its original storage.
 - **Baitware** – Baitware, similar to freeware, refers to the software with very limited or defective functions which is made available gratis/free of charge. Baitware is released to deceptively attract users and drive them to commercial products.
 - **Binary Tree** – A binary tree is a tree data structure in which each node has at most two children. Typically the child nodes are called a "left" pointer, a "right" pointer. The "root" pointer points to the topmost node in the tree. The left and right pointers recursively point to smaller "subtrees" on either side. One common use of binary trees is binary search trees; another is binary heaps.
 - **Bloatware** – Bloatware, also called software bloat or fatware, is a type of software that requires lots of computer resources such as disk space and RAM. It

is also used in a more general context to describe programs which appear to be using more system resources than necessary, or implementing extraneous features.

- **Blog Client** – Blog client, also known as weblog client, is a software that can manage (post, edit) blogs from operating system with no need to launch a web browser. A typical blog client has an editor, a spell-checker and a few more options that simplify content creation and editing.
- **Blogware** – Blogware, also called weblog software or blog software, is a category of software which consists of a specialized form of Content Management Systems specifically designed for creating and maintaining weblogs. Most blogware applications have features such as facilitating authoring and editing of blog posts or articles, various linking and web syndication features, and the ability to easily publish the blog to the world wide web.
- **Bug** – In computer programming, a bug, also called software bug, is an error, flaw, mistake, failure, or fault in a computer program that prevents it from working as intended, or produces an incorrect result. Bugs arise from mistakes and errors, made by people, in either a program's source code or its design. A program that contains a large number of bugs, and/or bugs that seriously interfere with its functionality, is said to be buggy. Reports about bugs in a program are referred to as bug reports, also called PRs (problem reports), trouble reports, CRs (change requests), and so forth.

C

- **C Programming Language** – The C programming language (often, just "C") is a general-purpose, procedural, imperative computer programming language developed in the early 1970s by Dennis Ritchie for use on the Unix operating system. The first major program written in C was the UNIX operating system. It has since spread to many other operating systems. Although originally designed as a systems programming language, C has proved to be a powerful and flexible language that can be used for a variety of applications, from business programs to engineering. C is a particularly popular language for

personal computer programmers because it is relatively small -- it requires less memory than other languages.

- **C#** – C# is an object-oriented programming language developed by Microsoft as part of their .NET initiative, and later approved as a standard by ECMA and ISO. C# has a procedural, object oriented syntax based on C++ that includes aspects of several other programming languages (most notably Delphi, Visual Basic, and Java) with a particular emphasis on simplification (fewer symbolic requirements than C++, fewer decorative requirements than Java).
- **C++** – C++, originally named "C with Classes, is a high-level programming language developed by Bjarne Stroustrup at Bell Labs. C++ adds object-oriented features to its predecessor, C. C++ is a statically-typed free-form multi-paradigm language supporting procedural programming, data abstraction, object-oriented programming, and generic programming. C++ is one of the most popular programming languages. The C++ programming language standard was ratified in 1998 as ISO/IEC 14882:1998, and the current version of which is the 2003 version, ISO/IEC 14882:2003. A new version of the standard (known informally as C++0x) is being developed.
- **Character** – In computer and machine-based telecommunications terminology, a character is a unit of information that roughly corresponds to a grapheme or a grapheme-like unit or symbol, such as in an alphabet or syllabify in the written form of a natural language. An example of a character is a letter, numeral, or punctuation mark. This includes all the ASCII and extended ASCII characters, including the space and control characters. In character-based software, everything that appears on the screen, including graphics symbols, is considered to be a character. In graphics-based applications, the term character is generally reserved for letters, numbers, and punctuation.
- **Character Code** – Character code is a computer code which represents a particular character or symbol with specific meaning. Most current operating systems use 8-bit character codes: some of which represent commands to the computer, while most of which represent the AlphaNumeric symbols of the main Western Languages. Other languages that use extended or alternate writing

systems, such as Asian languages, use 16 bits and are so called Double Byte character sets.

- **Code** – Code, in Computer Programming refers to source code or machine code. Source code is any series of statements written in some human-readable computer programming language, while machine code refers to instructions for a computer processor in some machine language. The word "code" is often used to distinguish instructions from data.
- **Command** – Command, in computing, refers to an instruction to a computer or device to perform a specific task. Every program that interacts with people responds to a specific set of commands. The set of commands and the syntax for entering them is called the user interface. Commonly a command is a directive to some kind of command line interface, such as a command interpreter. Commands come in different forms such as: 1) special words (keywords) that a program understands 2) function keys 3) choices in a menu 4) buttons or other graphical objects on your screen.
- **Command Interpreter** – Command interpreter is a program which reads textual commands from the user or from a file and executes them. Some commands may be executed directly within the interpreter itself (e.g. setting variables or control constructs), others may cause it to load and execute other files. Unix's command interpreters are known as shells.
- **Compiler** – Compiler is a type of computer program that translates source code into object code. A compiler is likely to perform many or all of the following operations: lexing, preprocessing, parsing, semantic analysis, code optimizations, and code generation.
- **Compiler Bug** – A compiler bug is a type of computer bug. Compiler bug may cause translating the source program incorrectly, so that when the program runs it produces the wrong answer or some error message that does not really relate to the original program. Some compilers also attempt to optimize the source code during translation, so that it will run faster, or use less memory, or both. This optimization is often the most complicated part of a compiler, and hence is likely to have the most bugs.

- **Copycat** – Copycat refers to the tendency of humans to duplicate the behavior of others. Copycat is also the name of a model of analogy making and human cognition based on the concept of the parallel terraced scan, developed by Douglas Hofstadter, Melanie Mitchell, and others.
- **Custom Software** – Custom software, also called bespoke software, is software that was developed with a specific organization and its requirements in mind. Custom software is necessary when mass market software does not satisfy the functionalities required.

D

- **Data Processing** – Data processing is a computer process that converts data into required information. The processing is usually assumed to be automated and running on a computer. There are many data processing applications, such as accounting programs that convert raw financial data into meaningful reports for various purpose. Another example is customer relationship management systems (CRM) and employee relationship data systems.
- **Data Structure** – Data structure is the pattern to store data in a computer so that it can be used efficiently. Often a carefully chosen data structure will allow a more efficient algorithm to be used. The choice of the data structure often begins from the choice of an abstract data structure. A well-designed data structure allows a variety of critical operations to be performed, using as few resources, both execution time and memory space, as possible. Data structures are implemented using the data types, references and operations on them provided by a programming language.
- **Decompiler** – A decompiler is a computer program that translates executable programs (the output from a compiler) into an equivalent (relatively) high level language (source code). By comparison, a disassembler translates an executable program into assembly language.
- **Distribution Software** – Distribution software is a software system that helps companies to manage internal and external resources. Distribution software manages everything from order processing and inventory control to

accounting, purchasing and customer service, supply chain management, sales, CRM, inventory, warehouse and finance management.

E

- **Emulator** – Emulator is a software or hardware device with emulation program to imitate another program or device. A software emulator allows computer programs to run on a platform (computer architecture and/or operating system) other than the one for which they were originally written. A hardware emulator is an emulator which takes the form of a hardware device. Examples include printer emulators inside the ROM of the printer, and FPGA-based emulators.
- **Enterprise Software** – Enterprise Software is a type of software that solves an enterprise wide problem (rather than a departmental problem) and usually enterprise software is written using Enterprise Software Architecture. Due to the cost of building what is often proprietary software only large organizations attempt to build software that models the entire business enterprise and is the core system of governing the enterprise and the core of business communications within the enterprise. Enterprise software is often categorized by the business function that it automates – such as accounting software, human resource management or sales force automation software. It also varies by industry verticals due to common business processes within a specific industry. There are enterprise systems devised for health care, for example, or for manufacturing enterprises.

F

- **FireFox** – Firefox, also known as Mozilla Firefox, is a free, open source, cross-platform, graphical web browser developed by the Mozilla Corporation and hundreds of volunteers. Firefox includes an integrated pop-up blocker, tabbed browsing, live bookmarks, support for open standards, and an extension mechanism for adding functionality. Although other browsers have some of these features, Firefox became the first such browser to include them all and achieve wide adoption.

- **Free Software** – Free software, according to the definition of the Free Software Foundation (FSF), refers to the software that everyone is free to copy, redistribute and modify. That implies that it must be available as source code. It does not imply that it is free of charge, so anyone can sell free software so long as they don't impose any new restrictions on its redistribution or use.
- **Free Software License** – Free software license refers to a license which grants permissions to the recipient to remove any ownership issues which would otherwise prevent the software from being free software. With free software license, recipients of the software is granted the freedom to modify and redistribute the software by the copyright holder.
- **Functional Programming** – Functional programming is a programming paradigm that conceives computation as the evaluation of mathematical functions and avoids state and mutable data. Functional programming emphasizes the application of functions, in contrast to imperative programming, which emphasizes changes in state and the execution of sequential commands. Functional programming is defined more by a set of common concerns and themes than any list of distinctions from other paradigms. Often considered important are higher-order and first-class functions, closures, and recursion. Other common features of functional programming languages are continuations, Hindley-Milner type inference systems, non-strict evaluation (including, but not limited to, "laziness"), and monads.

G

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- **Generic Software** – Generic Software, contrast with "custom software", refers to the ready-made software, traditionally shrink-wrapped but downloadable in today's market.Â
 - **Glueware** – Glueware is a type of software that can be used to "glue" or integrate systems, software components and databases together, to form a seamless integrated system..
 - **Guiltware** – Guiltware refers to the kind of shareware software that attempts to make the user register and pay for the software by exploiting the user's sense of guilt. For example, when people are using a un-registered version software,

on-screen messages are displayed, usually when the program is started, reminding users that they have an unregistered version of the program that they should pay for if they intend to continue using it. Some programs will also display the message at random intervals while the program is in use.

H

- **Horizontal Software** – Horizontal software, also known as horizontal application, refers to the kind of software used by many different kinds of organizations, such as word processing or bookkeeping software.

I

- **INI File: Initialization File** – An initialization file (INI file) is a configuration file that contains configuration data for Microsoft Windows based applications. Starting with Windows 95, the INI file format was superseded but not entirely replaced by a registry database in Microsoft operating systems. Although made popular by Windows, INI files can be used on any system thanks to their flexibility. They allow a program to store configuration data, which can then be easily parsed and changed.

- **Instruction** – In computer technologies, instruction, also known as computer instruction, refers to a basic command at the level of computer's machine language. It is typically a single operation of a processor within a computer architecture.

- **Instruction Scheduling** – Instruction scheduling, in computer technologies, is a compiler optimization phase used to improve instruction-level parallelism, which improves performance on machines with instruction pipelines. Without changing the meaning of the instructions, instruction scheduling tries to: 1) avoid pipeline stalls by rearranging the order of instructions; 2) order the instructions to avoid duplicated memory access.

- **Instruction Selection** – Instruction selection is a compiler optimization that transforms an intermediate representation of a program into the final compiled code, either in binary or assembly format. It works by "covering" the intermediate representation with as few tiles as possible.

- **Instruction Set** – An instruction set, also known as instruction set architecture (ISA), is the part of the computer architecture related to programming, including the native data types, instructions, registers, addressing modes, memory architecture, interrupt and exception handling, and external I/O. An ISA includes a specification of the set of opcodes (machine language), the native commands implemented by a particular CPU design.
- **Integrated Software Package** – Integrated software package refers to a suite of software with several applications integrated into one package. For example, a software package such as Microsoft Office that contains word processing, spreadsheet, database, graphics and communications. They are designed so that the user can move easily from one application to another, and transfer data easily from one application to another within the software package.
- **Interface** – An interface, in computer programming, is a defined means for a system to communicate with other systems. It is a boundary between a system and its environment providing ways of providing the system inputs and receiving outputs. In Object Oriented programming, class definitions and method signatures provide interfaces. Application program interfaces (APIs) form the interface of a system to applications and often consist of collections of functions or commands in a scripting language. Interfaces may be hidden (available only to the system developer) or exposed (available to others).
- **Interface Standard** – Interface standard refers to a standard in communications that defines one or more functional and/or physical characteristics necessary to allow the exchange of information between two or more systems or equipments. An interface standard may include operational specifications and acceptable levels of performance.
- **Interpreter Program** – An interpreter program is a computer program that executes an input program, while a compiler does not execute its input program (the source code) but only translates it into another language, usually executable machine code (also called object code) which is output to a file for later execution. People can execute the same source code either directly by an interpreter or by compiling it and then executing the machine code produced later. It takes longer to run a program under an interpreter than to run the

compiled code but it can take less time to interpret it than the total time required to compile and run it. This is especially important when prototyping and testing code when an edit-interpret-debug cycle can often be much shorter than an edit-compile-run-debug cycle.

- **IT: Information Technology** – Information Technology (IT) is a broad subject concerned with technology and other aspects of managing and processing information, especially in large organizations. In particular, IT deals with the use of electronic computers and computer software to convert, store, protect, process, transmit, and retrieve information. For that reason, computer professionals are often called IT specialists or Business Process Consultants, and the division of a company or university that deals with software technology is often called the IT department. Other names for the latter are information services (IS) or management information services (MIS), managed service providers (MSP).
- **ITS: Incompatible Time-Sharing System** – Incompatible time-sharing System(ITS) is operating system written for the DEC PDP-6

J

- **Java** – Java, in computer programming, is an object-oriented programming language developed by Sun Microsystems. It resembles C++, but was designed to avoid some of C++'s most notorious flaws. The Java language is used extensively on the World Wide Web, particularly because of its cross-platform nature, and its sandbox security concept.
- providers must agree to certain conformance requirements in order to declare their products as Java EE compliant; albeit with no ISO or ECMA standard.
- **Java Programming Language** – Java programming language, simply called Java in most cases, is an object-oriented programming language developed by James Gosling at Sun Microsystems 1995. Java borrows much syntax from C and C++ but has a simpler object model and fewer low-level facilities. Unlike conventional languages which are generally designed to be compiled to native code, Java is compiled to a bytecode which is then run

(generally using JIT compilation) by a Java virtual machine. Java has been adopted as a multipurpose, cross-platform lingua franca for network computing, including the World Wide Web.

- **JavaCC: Java Compiler Compiler** – Java Compiler Compiler(JavaCC) is a parser generator for the Java programming language. JavaCC generates a parser for a grammar provided in extended Backusâ€Naur form (EBNF) notation with the output as the Java source code.
- **Javadoc** – Javadoc is a computer software tool from Sun Microsystems for generating API documentation into HTML format from Java source code. Javadoc is the industry standard for documenting Java classes. Most integrated development environments (IDEs) will automatically generate Javadoc HTML.
- **JavaScript** – JavaScript is a scripting language developed by Netscape to enable Web authors to design interactive sites. Although it shares many of the features and structures of the full Java language, it was developed independently. Javascript can interact with HTML source code, enabling Web authors to spice up their sites with dynamic content. JavaScript is endorsed by a number of software companies and is an open language that anyone can use without purchasing a license.

L

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- **Legacy System** – A legacy system is an "antiquated" existing computer system or application program which continues to be used because the user does not want to replace or redesign it. Legacy systems are considered to be potentially problematic for several reasons. Legacy systems often run on obsolete (and usually slow) hardware, and sometimes spare parts for such computers become increasingly difficult to obtain. These systems are often hard to maintain, improve, and expand because there is a general lack of understanding of the system. The designers of the system may have left the organization, leaving no one left to explain how it works. Such a lack of understanding can be exacerbated by inadequate documentation or manuals getting lost over the years. Integration with newer systems may also be difficult because new software may use completely different technologies.

- **Libre Software** – Libre software refers to the kind of software that you may distribute with legal "freedom", which may or may not cost anything to get it. The European Commission coined the term in 2000 to avoid the confusing ambiguity of the English adjective "free", which means zero cost.
- **Linux** – Linux, also known as GNU/Linux, is a free and open source Unix-like computer operating system. Unlike proprietary operating systems such as Windows or Mac OS, all of Linux underlying source code is available to the general public for anyone to use, modify, and redistribute freely. Linux has gained the support of major corporations such as IBM, Sun Microsystems, Hewlett-Packard, and Novell for use in servers and is gaining popularity in the desktop market. It is used in systems ranging from supercomputers to mobile phones.
- **Logic Programming** – Logic programming (sometimes called logical programming) is programming that makes use of pattern-directed invocation of procedures from assertions and goals. The first logic programming language was Planner which featured pattern-directed invocation of procedural plans from both assertions and goals. In order to cope with the very limited memory systems that were available when it was developed, Planner used backtracking control structure so that only one possible computation path had to be stored at a time. Subsequently, Prolog was developed as a simplification of Planner that had pattern-directed invocation only from goals (also based on backtracking). From Planner there developed the programming languages QA-4, Popler, Conniver, and QLISP. The programming languages Mercury, Visual Prolog, Oz and Fril developed from Prolog. There are also concurrent logic programming languages (not based on backtracking) derived from Planner (e.g., Ether) and derived from Prolog.

M

- **Machine Code** – Machine code, also known as machine language, is a system of instructions and data directly understandable by computer central processing unit. Every CPU model has its own machine code, or instruction set, although there is considerable overlap between some. If CPU A understands the

full language of CPU B it is said that CPU A is compatible with B. CPU B may not be compatible with CPU A, as A may know a few codes that B does not.

- **Machine Code Instruction** – Machine code instructions are the "words" of a machine or a computer. Instructions are patterns of bits with different patterns corresponding to different commands to the machine. Every CPU model has its own machine code, or instruction set, although there is considerable overlap between some.

- **Machine Language** – Machine language, also known as machine code, is the lowest-level language (except for computers that utilize programmable microcode) directly understandable by a computer central processing unit (CPU). While easily understood by computers, machine languages are very hard to understand for humans because they consist entirely of numbers. Programmers, therefore, use either a high-level programming language or an assembly language. An assembly language contains the same instructions as a machine language, but the instructions and variables have names instead of being just numbers.

- **Microcode** – Microcode, also known as micro program, refers to the instruction set of a CPU as a sequence of microcode instructions (microinstructions), each of which typically consists of a number of bit fields and the address of the next microinstruction to execute. Microcode is the translation layer between machine instructions and the elementary operations of a computer. Microcode is stored in ROM and allows the addition of new machine instructions without requiring that they be designed into electronic circuits when new instructions are needed. Several microinstructions will usually be required to fetch, decode and execute each machine code instruction. The elements composing the microprogram/microcode exist on a lower conceptual level than the more familiar assembler instructions. Each element is differentiated by the "micro" prefix to avoid confusion: microprogram, microcode, microinstruction, microassembler, etc.

- **Microinstruction: Micro code Instruction** – Microcode Instructions (microinstructions) are very basic low-level instructions in a computer CPU, which are used to manipulate bit streams and byte ordering. Microinstructions

can control data flow and instruction-execution sequencing in a processor at a more fundamental level than machine instructions. Typically, a series of microinstructions is necessary to perform an individual machine instruction.

- **Micro-programming** – Micro-programming, also known as micro-coding, refers to the development of micro-programs or micro-codes, which are the instruction set of a CPU as a sequence of micro-code instructions (micro-instructions). Micro-programming allows CPU design engineers to write a micro-program to implement a machine instruction set. Even in the late stage of design process, micro-code could easily be changed. This greatly facilitated CPU design and led to more complex instruction sets. Architectures using micro-programming included the IBM System/360 and DEC VAX, the instruction sets of which were implemented by complex micro programs. The approach of using increasingly complex micro-code-implemented instruction sets was later called CISC.

- **Mozilla Firefox** – Mozilla Firefox, or simply known as Firefox, is a free, open source, cross-platform, graphical web browser developed by the Mozilla Corporation and hundreds of volunteers. Firefox includes an integrated pop-up blocker, tabbed browsing, live bookmarks, support for open standards, and an extension mechanism for adding functionality. Although other browsers have some of these features, Firefox became the first such browser to include them all and achieve wide adoption.

N

- **NanoCAD** – NanoCAD is a Java applet that was intended to eventually evolve into a useful computer-aided design system for nanotechnology. While that goal has yet to come to fruition, NanoCAD has at least influenced the direction of more advanced projects such as OpenChem and Fungimol.

- **Numerical Analysis** – Numerical analysis is the study of algorithms for the problems of continuous mathematics (as distinguished from discrete mathematics). Some of the problems it deals with arise directly from the study of calculus; other areas of interest are real variable or complex variable questions, numerical linear algebra over the real or complex fields, the solution

of differential equations, and other related problems arising in the physical sciences and engineering.

O

- **Object** – Generally, Object refers to any item that can be individually selected and manipulated. In computer programming such as object-oriented programming, an object is an individual unit of run-time data storage that is used as the basic building block of programs. These objects act on each other, as opposed to a traditional view in which a program may be seen as a collection of functions, or simply as a list of instructions to the computer. Each object is capable of receiving messages, processing data, and sending messages to other objects. Each object can be viewed as an independent little machine or actor with a distinct role or responsibility.
- **Object code** – Object code, also known as object file, is an intermediate representation of code generated by a compiler after it processes a source code file. Object files contain compact, pre-parsed code, often called binaries, that can be linked with other object files to generate a final executable or code library. An object file is mostly machine code that can be directly executed by a computer's CPU. An object file contains not only the object code, but also relocation information that the linker uses to assemble multiple object files into an executable or library, program symbols (names of variables and functions), and debugging information.
- **Object Model** – An object model is a sub kind of data model with primitive concepts identity, state, encapsulation, operations/methods, messages, inheritance, polymorphism/overloading. An object model deals to the properties of objects in general, in a specific computer programming language, technology, notation or methodology that uses them. For example, the Java object model, the COM object model, or the object model of OMT. Such object models are usually defined using concepts such as class, message, inheritance, polymorphism, and encapsulation. There is an extensive literature on formalized object models as a subset of the formal semantics of programming languages.

- **Object Database** – Object database refers to a type of database in which information is represented in the form of objects. The database management system for an object database is referred to variously as a ODBMS or OODBMS. Object database technologies becomes useful when: 1) a relational database becomes cumbersome to be used with complex data; 2) data is generally manipulated by application software written using object-oriented programming languages and tools such as C++, Java, Borland Delphi and C#, and the code needed to translate between this representation of the data, and the tuples of a relational database can be tedious to write and time-consuming to execute.

P

- **Packaged Software** – Packaged software refers to a commercial application program or collection of programs developed to meet the needs of a variety of users, rather than custom designed for a specific user or company. Packaged software is normally put on a CD (or disks), packaged in a box and sold to the general public.

- **Paint Program** – Paint program is a type of application that allows a user to "paint" on the computer screen. Using a mouse or other pointer, the user can select from various drawing and painting tools such as brushes, spray cans, etc. and a full palette of colors. The paint program allows the user to control the color of each pixel. Sophisticated graphics editing capabilities such as screens, filters, etc., can be used. Example of paint program include Adobe Illustrate and Coral Draw.

- **Portable Software** – Portable software refers to a type of software that can be used on more than one hardware platform, and easily switched from one to another.

- **Procedure** – Procedure, in Computer Programming, also called routine, subroutine, and function, is a section of a program that performs a specific task.

- **Procedure Programming** – Procedural programming refers to a programming paradigm based upon the concept of the procedure call. Procedures, also known as routines, subroutines, methods, or functions simply

contain a series of computational steps to be carried out. Any given procedure might be called at any point during a program's execution, including by other procedures or itself. Procedural programming is often a better choice than simple sequential or unstructured programming in many situations which involve moderate complexity or which require significant ease of maintainability.

- **Profiler** – In computer programming, a profiler is a performance analysis tool that measures the behavior of a program as it runs, particularly the frequency and duration of function calls. The output is a stream of recorded events (a trace) or a statistical summary of the events observed (a profile). These statistics include the number of calls to each subroutine and the total amount of time spent within each. This data can be used to learn which subroutines are the most critical and, therefore, demand the greatest code efficiency. Profilers use a wide variety of techniques to collect data, including hardware interrupts, code instrumentation, operating system hooks, and performance counters.

- **Programming Language** – A programming language is an artificial language that can be used to control the behavior of a machine (often a computer). Programming languages have syntactic and semantic rules used to define meaning. Programming languages are used to facilitate communication about the task of organizing and manipulating information, and to express algorithms precisely. Programming language usually refers to high-level languages, such as BASIC, C, C++, COBOL, FORTRAN, Ada, and Pascal. Each language has a unique set of keywords (words that it understands) and a special syntax for organizing program instructions. Each different type of CPU has its own unique lower level language, also known as machine language.

Q

R

- **Rainlender** – Rainlendar is an open-source computer application that displays a calendar on the desktop. It also can maintain events and a to-do list. It is popular because it uses few system resources when running, and supports "skins" or GUI changes. Because of the ability to be skinned, it has become a

mainstay on many shell replacement themes (such as Litestep and Aston). The name Rainlendar is a combination of 'Rainy' and calendar.

- **Remote Control Software** – Remote control software is a type of software used in remote administration to allow use of computers or other hardware at a separate location. A typical use is to control a server or desktop computer from another desktop computer. The remote control software consists of two separate computer programs, a "host version" that is installed on the computer to be controlled, and a "remote version" that is installed on the controlling computer. Remote control operation is used to take control of an unattended desktop personal computer from a remote locations well as to provide instruction and technical support to remote users.
- **Revision Control System** – Revision control system manages multiple revisions to a single unit of information, typically a digital document containing source code. It is most commonly used in engineering and software development to manage ongoing development of digital documents like application source code, art resources such as blueprints or electronic models and other critical information that may be worked on by a team of people. Changes to these documents are identified by incrementing an associated number or letter code, termed the "revision number", "revision level", or simply "revision" and associated historically with the person making the change.
- **Runtime** – In computer science, runtime or run time describes the operation of a computer program, the duration of its execution.

S

- **S/W: Software** – Software, sometimes abbreviated s/w, is also called a computer program that enables a computer to perform a specific task, as opposed to the physical components of the system (hardware). This includes application software such as a word processor, which enables a user to perform a task, and system software such as an operating system, which enables other software to run properly, by interfacing with hardware and with other software. Programs stored on non-volatile storage built from integrated circuits (e.g. ROM or PROM) are usually called firmware.

- **Search Engine** – A search engine is a computer system designed to help find information over a computer network such as the World Wide Web, inside a corporate or proprietary network or a personal computer. The search engine allows one to ask for content meeting specific criteria (typically those containing a given word or phrase) and retrieves a list of references that match those criteria. Search engines use regularly updated indexes to operate quickly and efficiently. Without further qualification, search engine usually refers to a Web search engine, which searches for information on the public Web. Other kinds of search engine are enterprise search engines, which search on intranets, personal search engines, which search individual personal computers, and mobile search engines. However, while different selection and relevance criteria may apply in different environments, the user will probably perceive little difference between operations in these.
- **Shareware** – Shareware is a type of software distributed on the basis of an honor system. Most shareware is delivered free of charge, but the author usually requests that you pay a small fee if you like the program and use it regularly. By sending the small fee, you become registered with the producer so that you can receive service assistance and updates. You may re-distribute shareware to others, but they too are expected to pay a fee if they use the product and like it. Sometimes, shareware is a light version of a commercial software, which has price. The author of the shareware expects a portion of users of the shareware to purchase the full commercial version if they like it.
- **Shelfware** – Shelfware refers to the software that gets purchased by a company or individual that ends up sitting on a shelf somewhere and not being used.
- **Shell** – A shell, in computer technologies, refers to the interface between the user and the computer's operating system. The shell interprets commands entered by the user, and passes them on to the operating system. A shell usually implies an interface with a command syntax (think of the DOS operating system and its "C:>" prompts and user commands such as "dir" and "edit"). DOS shells are COMMAND.COM and DOS shell; some UNIX shells are the Bourne shell (sh), the C shell (csh), and the Korn shell (ksh).

- **Shockwave** – Shockwave is an application that enables interactive and multimedia features, such as movies, sounds, and animations, to be embedded in Web pages. Shockwave allows developers to add items created with conventional authoring tools such as Director or Freehand.
- **Software** – Software, sometimes abbreviated s/w, is also called a computer program that enables a computer is also called a computer program that enables a computer to perform a specific task, as opposed to the physical components of the system (hardware). This includes application software such as a word processor, which enables a user to perform a task, and system software such as an operating system, which enables other software to run properly, by interfacing with hardware and with other software. Programs stored on non-volatile storage built from integrated circuits (e.g. ROM or PROM) are usually called firmware.
- **Structured Analysis** – Structured analysis is one of requirements analysis methods used in software engineering. Structure analysis includes a few approaches: 1) Data Flow Diagrams to show information flow and processing in a system. 2) Structure Charts show module structure and calling relationships. 3) State models include diagrams and tables that show the significant states in a system, events that cause transitions between states and the actions that result. 4) Task diagrams show threads of execution and the real-time operating system services like queues, event flags and semaphores that connect them in a multi-tasking environment.
- **Structured Design** – Structured design is one of systematic top-down design techniques used in software engineering, usually after structured analysis. The goal of structured design is to produce design specifications of a system, based on the system requirements generated from the structured analysis.
- **Structured Programming** – Structured programming refers to a software development technique that includes structured analysis and design and results in the development of a structured program. Structured programming can be seen as a subset or subdiscipline of procedural programming, one of the major programming paradigms.

- **System Software** – System software, also known as system program, is a type of software which includes the operating system and all utility programs that manage computer resources at a low level. System programs include operating systems, database managers, drivers, communications and messaging protocols, basic input/output system, compilers, loaders, linkers, and debuggers, etc.
- **Systems Analysis** – Systems analysis is the process of analysis of complex, large scale systems and the interactions within those systems. It involves the investigation of a business activity or clerical procedure, with a view to deciding if and how it can be computerized. The analyst discusses the existing procedures with the people involved, observes the flow of data through the business, and draws up an outline specification of the required computer system. The next step is systems design. Typically, an automated tool is used to facilitate the systems analysis. Tools in use for this purpose include Yourdon, SSADM (Structured Systems Analysis and Design Methodology), and Soft Systems Methodology.
- **Systems Program** – System program, also known as system software, is a type of software which includes the operating system and all utility programs that manage computer resources at a low level. System programs include operating systems, database managers, drivers, communications and messaging protocols, basic input/output system, compilers, loaders, linkers, and debuggers, etc.
- **Systems Programmer** – Systems programmer may refer to two types of jobs in an organization: 1) a person who writes system programs, or 2) a person who oversees the computer systems and is responsible for the installation and integration of new hardware and software.

T

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- **Tag** – A tag, in computer programming, refers to a command inserted in a document that specifies how the document, or a portion of the document, should be formatted. Tags are used by all format specifications that store documents as text files. This includes SGML and HTML. It may also refer to mark a section of a document with a formatting command.

- **Trigger** – Trigger, generally speaking, is the cause of an event. In a database management system (DBMS), a trigger is an SQL procedure that is executed when a record is added or deleted. It is used to maintain referential integrity in the database. A trigger may also execute a stored procedure. Triggers and stored procedures are built into DBMSs used in client/server environments.

U

- **Unix** – Unix (or UNIX) is a computer operating system originally developed in the 1960s and 1970s by AT&T Bell Labs. Today Unix is split into various branches, developed over time by many companies and non-profit organizations, such as contributors to the GNU project. The present owner of the UNIX trademark is The Open Group, while the present claimants on the rights to the UNIX source code are SCO Group and Novell. The UNIX operating system was designed to let multiple users access the computer at the same time and share its resources. While initially designed for medium-sized minicomputers, the operating system was soon moved to larger, more powerful mainframe computers. As personal computers grew in popularity, versions of UNIX found their way into these boxes, and a number of companies produce UNIX-based machines for the scientific and programming communities.
- **Unreachable Code** – In computer programming, unreachable code, also known as dead code, typically consists of blocks of programming instructions or entire routines that will never be accessed because all calls to them have been removed, or code that cannot be reached for some reason. Dead code is undesirable for a number of reasons, but primarily because it suggests there is a fault in the software. Detecting dead code is a form of static analysis and involves performing control flow analysis to find any code that will never be executed regardless of the values of variables and other conditions at run time.
- **Upgrade** – An upgrade, in computer industry, refers to a new version of a software or hardware product designed to replace an older version of the same product. Sometimes, upgrade means a better version such as a professional version with more functionalities and better performance to replace a lighter version of the same product.

- **User Interface** – The user interface is the aggregate of means by which people (the users) interact with a particular machine, device, computer program or other complex tool (the system). The user interface provides two critical functions: Input, allowing the users to manipulate the system, and Output, allowing the system to produce the effects of the users' manipulation. There are many types of user interfaces, such as GUI, Command Line, Web-based user interfaces, and touch interface, etc.
- **Utility Program** – Utility program, or utility, is a type of computer programs that support using the computer, an application or a development environment. Utility programs include file management, searching for files, comparing file contents as well as performing diagnostic routines to check performance and current health of the hardware. Utilities that support a development environment can perform a myriad of tasks.

V

- **Viewer Program** – Viewer program is a utility software that enables you to read a file in its native format. Many shell utilities and file managers include viewers so that you can display different types of files.

W

- **Web Page** – A web page is an HTML/XHTML document that is included in a website. A web page is almost always accessible over the network or Internet via HTTP.
- **Weblog Software** – Weblog software, also called blog software or blogware, is a category of software which consists of a specialized form of Content Management Systems specifically designed for creating and maintaining weblogs. Most weblog applications have features such as facilitating authoring and editing of blog posts or articles, various linking and web syndication features, and the ability to easily publish the blog to the world wide web.
- **Word Processing** – Word processing refers to the process of using a computer to create, edit, format and print documents. To perform word

processing, a special program called a word processor is required, which enables you to create a document, store it electronically on a disk, display it on a screen, modify it by entering commands and characters from the keyboard, and print it on a printer.

- **Word Processor** – Word processor is computer program that enables you to perform word processing functions such as creating, editing, formatting and printing documents.

Z

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- **ZIP File Format** – The ZIP file format is a popular data compression and archival format. A ZIP file contains one or more files that have been compressed or stored. The ZIP format was originally designed by Phil Katz for PKZIP. However, many software utilities other than PKZIP itself are now available to create, modify or open ZIP files, notably WinZip, BOMArchiveHelper, PicoZip, Info-ZIP, WinRAR, IZArc and 7-Zip. ZIP files generally use the file extensions ".zip" or ".ZIP" and the MIME media type application/zip.
 - **Zippping** – Zippping refers to the process of compressing a file so it takes up less space. The compress files after zippping is called a zip file. There are two types of Zip files, normal (requiring a program to extract them) and self-executing that open up automatically. PKZip and WinZip are popular zippping and unzipping programs.

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Навчальне видання

НЕТЕЦЬКА Тетяна Миколаївна

Business vocabulary and grammar in use: self-study practice book

**Лексико-граматичний практикум
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В авторській редакції
Комп'ютерна верстка *Н.О. Шелестова, Т.О. Михайлик*

План 2017 р., поз. 34

Підп. до друку 22.01.18 Формат 60x84 1/16. Папір офсетний.
Riso-друк. Гарнітура Таймс. Ум. друк. арк. Наклад 50 прим.
Зам. № Ціна договірна

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Видавничий центр НТУ "ХП",
вул. Кирпичова, 2, Харків -2, 61002
Свідоцтво про державну реєстрацію ДК № 3657 від 24.12.2009 р.