This bachelor thesis is devoted to four different proofs of Tychonoff's Theorem. The first proof is based on definitions of compact topological space and product topology. The second proof is a construction of convergent subnet of an arbitrary net in a product of compact spaces. The third proof uses the fact that topological space is compact if and only if every universal net is convergent. The last proof is based on characterization of compact spaces using systems of closed subsets with the finite intersection property.