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One algorithm for branch and bound method for solving concave optimization problem

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Abstract

© Published under licence by IOP Publishing Ltd.The article describes the algorithm for branch and bound method for solving the concave programming problem, which is based on the idea of similarity the necessary and sufficient conditions of optimum for the original problem and for a convex programming problem with another feasible set and reverse the sign of the objective function. To find the feasible set of the equivalent convex programming problem we construct an algorithm using the idea of the branch and bound method. We formulate various branching techniques and discusses the construction of the lower objective function evaluations for the node of the decision tree. The article discusses the results of experiments of this algorithm for some famous test problems of a particular form.

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