Analyzing on the Decomposition based Pricing Procedure for Solving Two Person Zero Sum Game Problems

Abstract

Objective of this paper is to analyze on the decomposition based pricing (DBP) method for solving two person zero sum game problems. Decomposition based algorithms have been developed which is able to solve two person zero sum game problems with single payoff elements using the linear programming (LP). To develop this procedure, idea of DBP method have used. Its computer oriented program has also introduced by using a mathematical programming language (AMPL). A real life oriented problem has introduced to show the efficiency of our algorithm and its program. The ability of our program has shown in saving labor and time for solving game problems by analyzing a number of numerical examples.

References

Analyzing on the Decomposition based Pricing Procedure for Solving Two Person Zero Sum Game Problems through Computer Algebra


Index Terms

Computer Science
Applied Mathematics

Keywords

Game, Pure and Mixed strategy, DBP, LP, Computer Algebra.