Solving Three-player strategic games by Lemke-Howson algorithm using coalative games

Sh. Jafarí, PhD. student of Department of Mathematics, Shahed University, shahijafariz@yahoo.com
H. Navidi, Associate professor of Department of Mathematics, Shahed University, navidi@shahed.ac.ir

Abstract: The Lemke-Howson algorithm is an effective method to find at least one Nash Equilibrium for a two-player bimatrix game. Here we want to use Lemke-Howson algorithm to find Nash Equilibrium of Three-player strategic games. First we change Three-player strategic game into two-player bimatrix game, then solve it by the L-H algorithm and perform the program at matlab programming space.

Keywords: Equilibrium, Coalition, Cooperative game, Strategic game.