

Game Theory

Game theory is the study of mathematical models of strategic interaction between rational decision-makers. It has many applications; including games. From these games is a game called Lights-grid game.

Application: Lights Grid Game.

Description: It is a game where you have a 5x5 grid of lights. You can click on any light, both the light you clicked on and the adjacent lights (upwards, downwards, left and right) changes its status; if they were on, they turn off, and vice-versa.

Goal: You need to make all cells turned on by minimum number of moves where each move is a click on a cell.

The original mathematical model: the algorithm uses matrices multiplication and addition, to tell you the minimum number of moves to light the cells.

