

Povzetek

V nalogi bomo spoznali igro *Lights Out* in naredili matematični model igre. Določili bomo kriterije za obstoj rešitve za dano začetno stanje. Nato bomo matematični model igre uporabili v praksi in razvili strategijo reševanja. V zadnjem poglavju bomo obravnavali še poseben primer igre *Lights Out*, igro *Mini Lights Out*, za katero bomo prav tako določili postopek reševanja.

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Ključne besede: Matrika, sistem linearnih enačb, kombinatorična igra.

Abstract

The paper presents the *Lights Out* game and making of a mathematical model of the game. Criteria for a given initial state of the game are determined. Then the mathematical model of the game is used in practice and a solution strategy is developed. Last chapter presents a special version of the *Lights Out* game entitled *Mini Lights Out* for which a solution procedure is also determined.

Math. Subj. Class. (2000): 15A06, 91A46.

Keywords: Matrix, system of linear equations, combinatorial game.

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