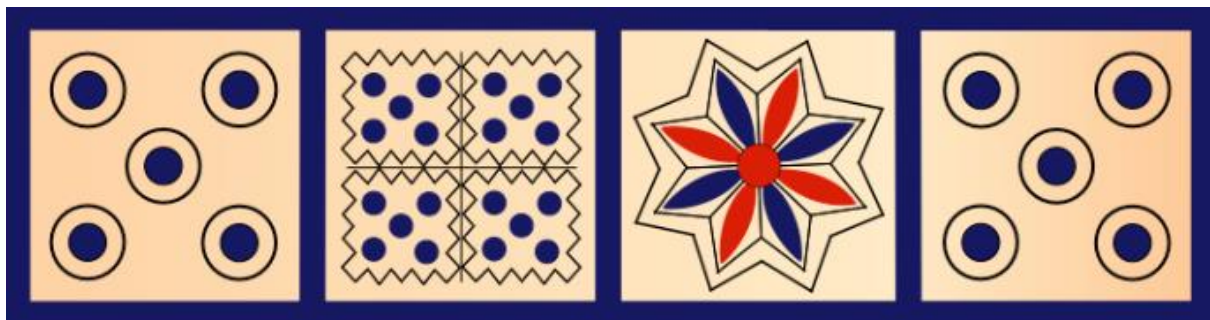




# Royal Game of UR

Pop Razvan-Horia 342

The project purpose is to simulate a simplified game of UR. The game uses four tetrahedrons with two painted corners, equivalent with 4 coins, a four segment board and seven pieces for each player.

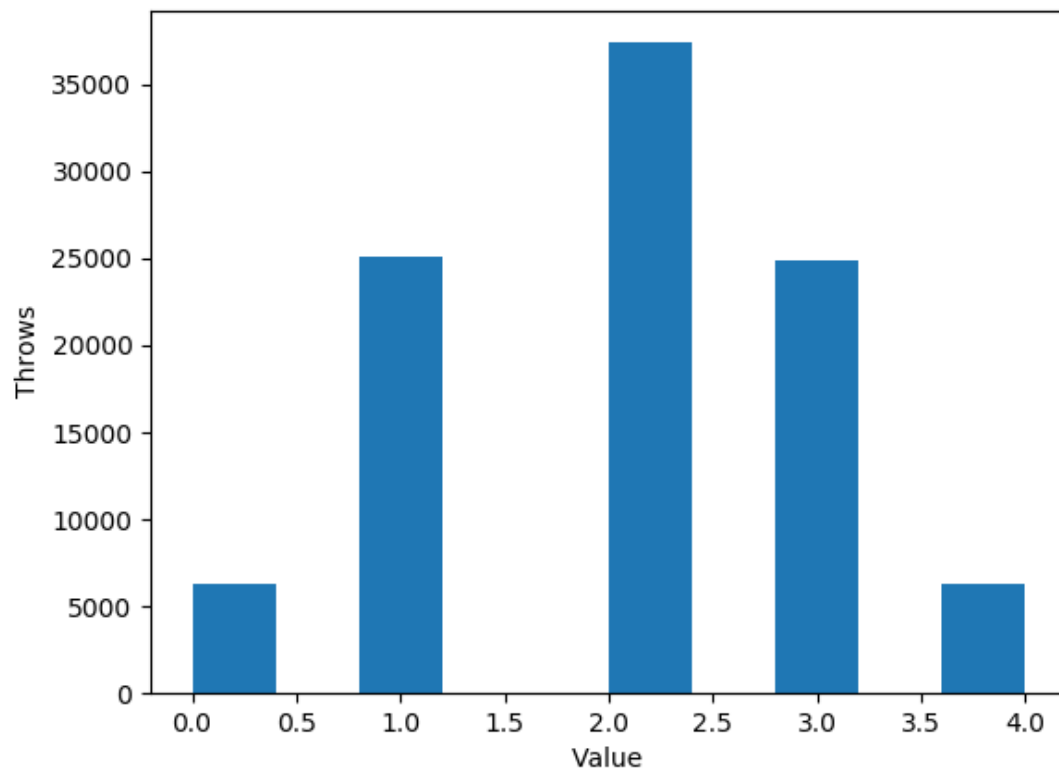


The player who manages to put all his pieces on and of the board wins, and if a player's piece lands on an opponent's piece, the opponent takes it back and need to place it on the board again after a "dice" throw. After a piece is placed on the board the player must throw a number big enough to take his piece of the board.



The probability of each number are as follows:

0 –  $1/16$ , 1 –  $4/16$ , 2 –  $6/16$ , 3 –  $4/16$ , 4 –  $1/16$



And the simulation plays a game as two players.

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Table [1 2 2 0] Player 1: left- 2 out- 4 Player 2: left- 0 out- 5
Table [1 2 1 0] Player 1: left- 1 out- 4 Player 2: left- 1 out- 5
Table [1 2 2 0] Player 1: left- 2 out- 4 Player 2: left- 0 out- 5
Table [1 2 2 0] Player 1: left- 2 out- 4 Player 2: left- 0 out- 5
Table [1 2 0 0] Player 1: left- 2 out- 4 Player 2: left- 0 out- 6
Table [1 1 0 0] Player 1: left- 1 out- 4 Player 2: left- 1 out- 6
Table [2 1 0 0] Player 1: left- 2 out- 4 Player 2: left- 0 out- 6
Table [1 1 0 0] Player 1: left- 1 out- 4 Player 2: left- 1 out- 6
Table [2 1 0 0] Player 1: left- 2 out- 4 Player 2: left- 0 out- 6
Table [2 1 0 1] Player 1: left- 1 out- 4 Player 2: left- 0 out- 6
Table [2 1 0 1] Player 1: left- 1 out- 4 Player 2: left- 0 out- 6
Table [2 1 1 1] Player 1: left- 0 out- 4 Player 2: left- 0 out- 6
Table [2 1 1 1] Player 1: left- 0 out- 4 Player 2: left- 0 out- 6
Table [2 1 0 1] Player 1: left- 0 out- 5 Player 2: left- 0 out- 6
Table [2 1 0 1] Player 1: left- 0 out- 5 Player 2: left- 0 out- 6
Table [2 1 0 0] Player 1: left- 0 out- 6 Player 2: left- 0 out- 6
Table [2 1 0 0] Player 1: left- 0 out- 6 Player 2: left- 0 out- 6
Table [2 1 0 0] Player 1: left- 0 out- 6 Player 2: left- 0 out- 6
Table [2 1 0 0] Player 1: left- 0 out- 6 Player 2: left- 0 out- 6
Table [2 0 0 0] Player 1: left- 0 out- 7 Player 2: left- 0 out- 6
Player 1 is the winner
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