

Lab-2 Game Minimax - Bath B 9557

1] What is the relationship between Tic Tac Toe and magic square?

→ 1] The relationship between Tic Tac Toe and magic squares is based on strategic patterns that can be applied to the game.

2] A magic square grid of numbers, where the sum of the numbers in each row, column and diagonal is the same.

3] In Tic-Tac-Toe, the concept of magic squares is used as a heuristic strategy for making moves. By placing marks in certain positions corresponding to a magic square pattern, a player can increase their chances of winning or forcing a draw.

2] What is a magic square of order n ?

→ 1] The magic square of order n is a square grid containing n rows and n columns, filled with distinct integers from 1 to n^2 , such that the sum of the numbers in each row, column and the diagonal is the same.

2] The sum of numbers in any row, column or diagonal of the square equals the constant value. This constant value is known as the magic constant and it is calculated as $\frac{n^2(n+1)}{2}$.

3] Magic squares have been studied for centuries and have various properties and patterns depending on value of n . They are widely used in mathematics, art and even in games like Tic Tac Toe for strategic moves.