

## AI Postlab exp 2

Q1) What is the relationship between tic-tac-toe and magic square?

Ans There is a relationship between Tic Tac Toe and magic square particularly in the context of a  $3 \times 3$  magic square. In Tic Tac Toe, players aim to create a line of three of their symbols in a row, column or diagonal. A  $3 \times 3$  magic square is a mathematical construct where the sum of the numbers in each row, column and both main diagonals is the same. They are usually integers arranged in a grid.

Q2) What is a magic square of order  $n$ ?

Ans A magic square of order  $n$  is an arrangement of the numbers from 1 to  $n^2$  in a square grid of size  $n \times n$  such that the sum of the numbers in each row each column and both main diagonals is the same. This constant sum known as the magic constant or magic sum. This most well known and studied magic square is of order 3 ( $3 \times 3$ ).