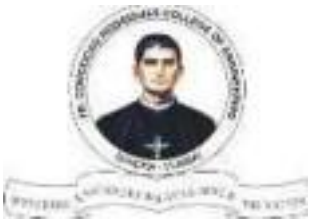

Fr. Conceicao Rodrigues College of Engineering Fr. Agnel Ashram, Bandstand, Bandra (W), Mumbai - 400050

Department of Computer Engineering
Academic Term II: 23-24

Class: B.E (Computer), Sem – VI Subject Name: Artificial Intelligence

Student Name: Sumit Sanjay Rai Roll No: 9570

Practical No:	**2**
Title:	Tic Tac Toe game implementation by Magic Square Method
Date of Performance:	05/02/2024
Date of Submission:	12/02/2024

Rubrics for Evaluation:

Sr. No	Performance Indicator	Excellent	Good	Below Average	Marks
1	On time Completion & Submission (01)	01 (On Time)	NA	00 (Not on Time)	
2	Logic/Algorithm Complexity analysis (03)	03(Correct)	02(Partial)	01 (Tried)	
3	Coding Standards (03): Comments/indention/Naming conventions Test Cases /Output	03(All used)	02 (Partial)	01 (rarely followed)	
4	Post Lab Assignment (03)	03(done well)	2 (Partially Correct)	1(submitted)	
Total					

Signature of the Teacher:

Post Lab Assignment:

1. What is the relationship between tic-tac-toe and magic square?
2. What is a magic square of order n?

Name: Sumit S. Rai

Roll no: 9570

Class: TEcomps A

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Post Lab Assignment : Experiment - 2.

Q.1. What is the relationship between tic-tac-toe and magic square ?

Ans. 1. Tic - Tac - Toe and magic square are related through the arrangement of the game board.

2. In Tic - Tac - Toe players aim to create winning combinations of their marks in rows, columns or diagonals.

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

4. The numbers in a magic square can represent positions on the Tic - Tac - Toe grid.

5. By using the numbers of a magic square, we can easily identify winning combinations in Tic - Tac - Toe.

Q.2. What is a magic square of order n ?

Ans. 1. A magic square is a square grid containing numbers arranged in a way that each row, column and diagonal adds up to the same constant sum.

2. The order of a magic square refers to the number of rows and columns it has.

3. For a magic square of order n, it contains n rows and n columns.

4. The numbers used in a magic square of order n range from 1 to n^2.

5. The sum of each row, column, and diagonal in a magic square of order n is called the magic constant, denoted by M.

Formula for calculating the magic constant (M) of a magic square of order n:

$$M = \frac{n \cdot (n^2+1)}{2}$$

where $M \rightarrow$ Magic Constant.

$n \rightarrow$ order of magic square