

## Postlab Experiment : 1

Q1. What is easiest way to win tic-tac-toe game?

- 1. Start by playing your first mark in Centre of square
- 2. If your opponent doesn't place their mark in corner square place your mark there
- 3. Otherwise place your mark opposite to your first move.
- 4. From your third move onward prioritize completing rows, column or diagonal while blocking opponent moves

Q2 What is algorithm to win 5\*5 Tic Tac Toe?

- 1. Control the Center square
- 2. Create two in a row, three in a row, combination horizontal vertical or diagonally
- 3. Secure adjacent corner square to create multiple winning path
- 4. Control edge square to add flexibility to winning combination and block moves
- 5. Anticipate opponent moves and block potential winning moves while advancing your own strategy
- 6. Be Flexible and adapt strategy based on current state and opponent moves

Q3 Is there way to never lose a Tic Tac Toe?

- 1. Start in center. Always begin with center square for more winning opportunities
- 2. Create and block. Prioritize forming winning combination while blocking your opponent moves to maintain control and increase your chances of winning
- 3. Adapt strategy. Adjust your approach based on board state and opponent move to stay ahead and maximize winning potential

4. What can tic tac toe help you with?

1. Strategic Thinking: Planning & executing moves to out your opponent

2. Problem solving: Analyze the game state & find optimal moves to achieve victory

3. Pattern recognition: Identifying patterns & potential winning combinations

4. Score good grade: Helps in game marks for A-Z

5. Decision making: Evaluating different options and selecting best course of action.

6. Critical thinking: Assessing consequences of each move and predicting opponent response