Post Lab Assignment Experiment 1:

1. What is the easiest trick to win Tic-Tac-Toe?

A. The easiest trick to win Tic-Tac-Toe is to play as the first player and place the symbol in the centre square. This move maximises the chances of winning if the opponent does not make the best moves.

2. What is the algorithm to follow to win a 5 ✕ 5 Tic-Tac-Toe?

A. There is no guaranteed algorithm to win a 5 ✕ 5 Tic-Tac-Toe since the game becomes more complex with the larger grid size. However, strategies from regular 3 ✕ 3 Tic-Tac-Toe can still be applied, such as aiming to create a winning line while blocking the opponent's attempts to do the same.

3. Is there a way to never lose at Tic-Tac-Toe?

A. While it is theoretically possible to never lose, achieving this in practicality relies on the opponent making mistakes or not following optimal strategies. The game has a finite number of possible board positions, so a perfect player could force a draw every time against the opponent.

4. What can Tic-Tac-Toe help you with?

A. Tic-Tac-Toe can help with several cognitive skills, including strategic thinking, pattern recognition, decision-making, and planning ahead. It is often used as a teaching tool for basic game theory and as a simple introduction to more complex board games. Additionally, playing TicTacToe can also be a fun way to pass time and engage in friendly competition.