INTRODUCTION

Tic Tac Toe game can be played by two players where the square block (3x3) can be filled with a cross (X) or a circle (O).

GAME PLAY:

This is a relatively simple game that is usually played on a grid of 3-by-3 squares, to make it more complex it can even be played by increasing the size of the grid/ board to 4-by-4 or 5-by-5 The goal of tic-tac-toe game is to be the first player/person to get three in a row or a column or a diagonal on a 3-by-3 grid.
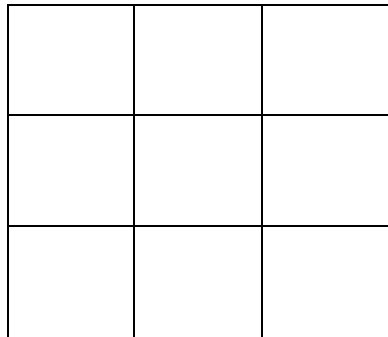

Fig-1(1) 3-by-3 grid of the game

● Consider you are **X**, your opponent as **O**. Players take turns in putting their marks in the empty squares.

● The first player to get three of her/his marks in a row or a column or diagonally is considered as a winner.

● If no player has got 3 marks in a row then the game is considered to be a tie.

To win at tic-tac-toe you got to have the strategy meaning you'll have to figure out what you need to do to win , which includes

● Figuring out how to get 3 **X**s in a row or column or diagonally.

● Another part is how do you stop your opponent in getting 3 **O**s in a row or a column or diagonally.

● When you are done with the first turn of yours, you'll have to think ahead as to where you should place your **X** in the next turn.

● Look at the empty squares and decide which one makes the good choices, that might also make up the three **X**s in a row or column or diagonally.

● Watch your opponent's move so that you could change your next move.

If attention is paid and you always look ahead, you'll never have a chance of losing the game of tic-tac-toe rather it will be a tie.

Here is a sample of the tic-tac-toe game moves.
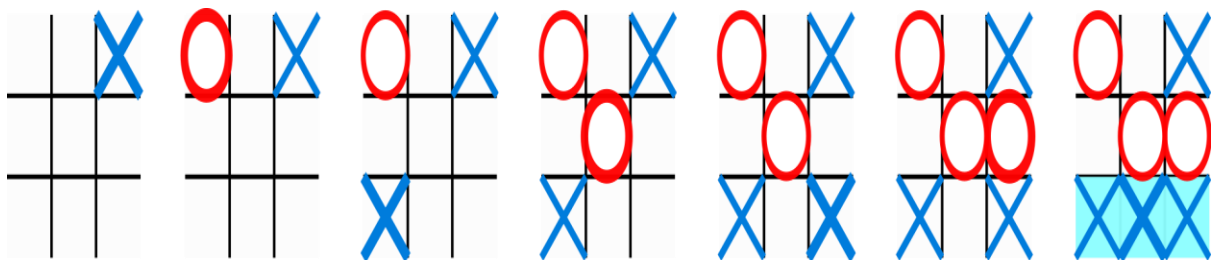
We aim to implement this game using IC's and simulate the game in Xilinx ISE.