Lab-9 Finding Optimal Question sol^n in Tic-Tac-Toe
using MiniMax Algorithm in game Theory

① Finding the Best Move:

function findBestMove(board):
    bestMove = NULL
    for each move in board:
        if current move in better than bestMove
            bestMove = current move
    return bestMove

② MinMax :

function MinMax(board, depth, isMaximizingPlayer):

    if current board state is a terminal state:
        return value of the board

    if isMaximizingPlayer:
        bestVal = -INFINITY
        for each move in board:
            value = minimax(board, depth+1, false)
            bestVal = max(bestVal, value)
        return bestVal

    else :
        bestVal = +INFINITY
        for each move in board:
            value = minmax(board, depth+1, true)
            bestVal = min(bestVal, value)
        return bestVal

Checking for Game Over state:

function isMoveLeft(board):
   for each cell in board:
     if current cell is empty:
      return true
   return false

Tic-tac-toe game tree diagrams with X and O board states