**Exp 12: Write the python program for Tic Tac Toe game**

**Input:**

def print\_board(board):

    print("\n")

    for row in board:

        print(" | ".join(row))

        print("-" \* 5)

    print("\n")

def check\_winner(board, player):

    for row in board:

        if all(cell == player for cell in row):

            return True

    for col in range(3):

        if all(board[row][col] == player for row in range(3)):

            return True

    if all(board[i][i] == player for i in range(3)):

        return True

    if all(board[i][2 - i] == player for i in range(3)):

        return True

    return False

def is\_full(board):

    return all(cell != " " for row in board for cell in row)

def tic\_tac\_toe():

    board = [[" " for \_ in range(3)] for \_ in range(3)]

    current\_player = "X"

    print("Welcome to Tic Tac Toe!")

    print\_board(board)

    while True:

        print(f"Player {current\_player}'s turn.")

        try:

            row = int(input("Enter row (0, 1, 2): "))

            col = int(input("Enter col (0, 1, 2): "))

        except ValueError:

            print("Please enter valid integers for row and col.")

            continue

        if 0 <= row < 3 and 0 <= col < 3 and board[row][col] == " ":

            board[row][col] = current\_player

            print\_board(board)

            if check\_winner(board, current\_player):

                print(f"Player {current\_player} wins!")

                break

            elif is\_full(board):

                print("It's a draw!")

                break

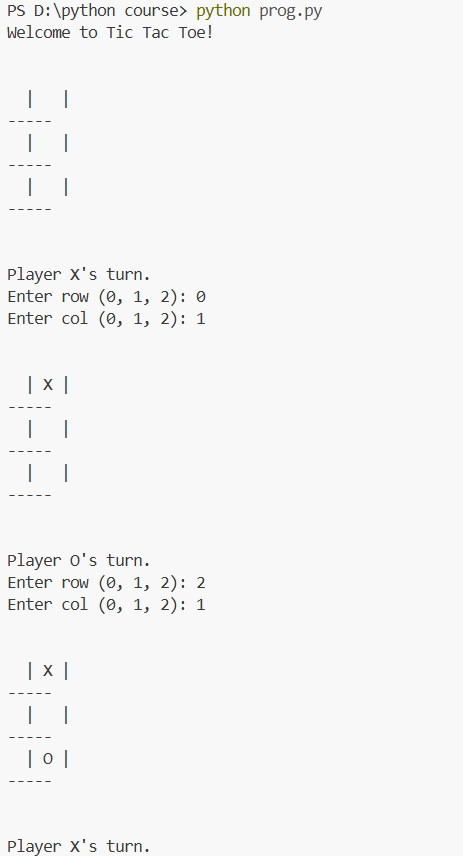
            current\_player = "O" if current\_player == "X" else "X"

        else:

            print("Invalid move! Try again.")

tic\_tac\_toe()

**output:**

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