

## EXPERIMENT:12 Write the python program for Tic Tac Toe game

### PROGRAM:

```
def print_board(board):
    for row in board:
        print(" | ".join(row))
        print("-" * 5)

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)) or all(board[i][2-i] == player for i in range(3)):
        return True
    return False

board = [[" "] * 3 for _ in range(3)]
player = "X"

for turn in range(9):
    print_board(board)
    r = int(input(f'Player {player}, enter row (0-2): '))
    c = int(input(f'Player {player}, enter col (0-2): '))
    if board[r][c] != " ":
        print("Cell already taken, try again!")
        continue
    board[r][c] = player
```

```

if check_winner(board, player):
    print_board(board)
    print(f"Player {player} wins!")
    break
player = "O" if player == "X" else "X"
else:
    print_board(board)
    print("It's a draw!")

```

## OUTPUT:

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Player X, enter row (0-2): 1
Player X, enter col (0-2): 2
|  | 
-----
|  | X
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|  | 
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```