28. Tic Tac Toe Game (2 Player)

def print\_board(board):

for row in board:

print(" | ".join(row))

print("-" \* 5)

def check\_win(board, player):

win\_states = [

[board[0][0], board[0][1], board[0][2]],

[board[1][0], board[1][1], board[1][2]],

[board[2][0], board[2][1], board[2][2]],

[board[0][0], board[1][0], board[2][0]],

[board[0][1], board[1][1], board[2][1]],

[board[0][2], board[1][2], board[2][2]],

[board[0][0], board[1][1], board[2][2]],

[board[0][2], board[1][1], board[2][0]],

]

return [player]\*3 in win\_states

def is\_full(board):

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

def tic\_tac\_toe():

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

current = 'X'

while True:

print\_board(board)

row = int(input(f"Player {current}, enter row (0-2): "))

col = int(input(f"Player {current}, enter col (0-2): "))

if board[row][col] == ' ':

board[row][col] = current

if check\_win(board, current):

print\_board(board)

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

break

elif is\_full(board):

print\_board(board)

print("It's a draw!")

break

current = 'O' if current == 'X' else 'X'

else:

print("Cell already taken. Try again.")

# Uncomment to play:

# tic\_tac\_toe()