

```

1 def print_board(board):
2     for row in board:
3         print(" | ".join(row))
4         print("-" * 9)
5
6 def check_winner(board, player):
7     for i in range(3):
8         if all(board[i][j] == player for j in range(3)) or \
9             all(board[j][i] == player for j in range(3)):
10            return True
11
12    if all(board[i][i] == player for i in range(3)) or \
13        all(board[i][2-i] == player for i in range(3)):
14        return True
15    return False
16
17 def tic_tac_toe():
18     board = [[" "] * 3 for _ in range(3)]
19     players = ['X', 'O']
20     moves = 0
21     print("Tic-Tac-Toe Game (2 Players)\n")
22     print_board(board)
23
24     while moves < 9:
25         player = players[moves % 2]
26         try:
27             row = int(input(f"Player {player}, enter row (0-2): "))
28             col = int(input(f"Player {player}, enter column (0-2): "))
29         except ValueError:
30             print("Invalid input! Enter numbers 0-2.")
31             continue

```

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32
33     if 0 <= row <= 2 and 0 <= col <= 2:
34         if board[row][col] == " ":
35             board[row][col] = player
36             moves += 1
37             print_board(board)
38             if check_winner(board, player):
39                 print(f"Player {player} wins!")
40                 return
41             else:
42                 print("Cell already occupied! Try again.")
43         else:
44             print("Invalid position! Enter numbers between 0 and 2.")
45     print("It's a tie!")
46
47 tic_tac_toe()
48
```

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>>> %Run -c $EDITOR_CONTENT
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Tic-Tac-Toe Game (2 Players)

Player X, enter row (0-2): 1
Player X, enter column (0-2): 1

	X	

Player O, enter row (0-2): 2
Player O, enter column (0-2): 2

	X	

		O

Player X, enter row (0-2): 0
Player X, enter column (0-2): 2

		X

	X	

		O

Player O, enter row (0-2): 2
Player O, enter column (0-2): 0

		X

	X	

O		O

```

Player X, enter row (0-2): 2
Player X, enter column (0-2): 1
  |  | X
-----
  | X |
-----
O | X | O
-----
Player O, enter row (0-2): 0
Player O, enter column (0-2): 1
  | O | X
-----
  | X |
-----
O | X | O
-----
Player X, enter row (0-2): 1
Player X, enter column (0-2): 0
  | O | X
-----
X | X |
-----
O | X | O
-----
Player O, enter row (0-2): 1
Player O, enter column (0-2): 2
  | O | X
-----
X | X | O
-----
O | X | O
-----
Player X, enter row (0-2): 0
Player X, enter column (0-2): 0
X | O | X
-----
X | X | O
-----
O | X | O
-----
It's a tie!

```

>>>