

Generated code may be subject to a license | praveenreddy5/csa1782-ai | Sakthikishore07/CAS1719-AI-PRACTICAL- | Ialla1110/Artintel | priyanshu-technowala/Tic-Tac-Toe | NoWfAl17ds/Minor-project # prompt: give a tic tac toe program for 2 players

```
def print_board(board):
    print("----")
    for i in range(3):
       print("|", board[i*3], "|", board[i*3+1], "|", board[i*3+2], "|")
       print("----")
def check_win(board, player):
    # Check rows, columns, and diagonals
    for i in range(3):
       if all(board[i*3+j] == player for j in range(3)):
           return True
       if all(board[i+j*3] == player for j in range(3)):
           return True
    if all(board[i*4] == player for i in range(3)):
       return True
    if all(board[2+i*2] == player for i in range(3)):
       return True
    return False
def check_draw(board):
   return all(cell != " " for cell in board)
def play_tic_tac_toe():
   board = [" "] * 9
    current_player = "X"
    while True:
       print_board(board)
       try:
           move = int(input(f"Player {current_player}, enter your move (1-9): ")) - 1
           if not 0 <= move <= 8 or board[move] != " '</pre>
               print("Invalid move. Try again.")
               continue
       except ValueError:
           print("Invalid input. Please enter a number between 1 and 9.")
           continue
       board[move] = current_player
       if check_win(board, current_player):
           print board(board)
           print(f"Player {current_player} wins!")
           break
       elif check_draw(board):
           print_board(board)
           print("It's a draw!")
           break
       else:
           current_player = "0" if current_player == "X" else "X"
if __name__ == "__main__":
    play_tic_tac_toe()
\rightarrow Player O, enter your move (1-9): 4
     | X | | |
     | 0 | | |
     1 1 1 1
```

Player X, enter your move (1-9): s Invalid input. Please enter a number between 1 and 9. | X | O | X | |0||| $I \quad I \quad I \quad I$ Player X, enter your move (1-9): 5 | X | O | X | | 0 | X | | $I \quad I \quad I \quad I$ Player O, enter your move (1-9): 6 | X | O | X | | 0 | X | 0 | $I \quad I \quad I \quad I$ Player X, enter your move (1-9): 9 | X | O | X | | 0 | X | 0 | | | X | Player X wins!