ONLY TYPED CODE

Tic-Tac-Toe Game

By

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Typed Code

```
import random
def print_board(board):
  """Prints the Tic-Tac-Toe 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):
  """Checks if the given player has won the game."""
  win_conditions = [
      [0, 1, 2], [3, 4, 5], [6, 7, 8],  # Rows
      [0, 3, 6], [1, 4, 7], [2, 5, 8],  # Columns
      [0, 4, 8], [2, 4, 6]              # Diagonals
  ]
  for condition in win_conditions:
    if all(board[i] == player for i in condition):
      return True
  return False
```

```
def check_draw(board):
  """Checks if the game is a draw."""
  return all(cell != " " for cell in board)

def get_player_move(board):
    """Gets the player's move."""
    while True:
        try:
            move = int(input("Enter your move (1-9): ")) - 1
            if 0 <= move <= 8 and board[move] == " ":
                return move
            else:
                print("Invalid move. Try again.")
        except ValueError:
            print("Invalid input. Please enter a number between 1 and 9.")



def get_computer_move(board):
    """Gets the computer's move using a simple strategy."""
    # Check for winning move
    for i in range(9):
        if board[i] == " ":
            board[i] = "O"
            if check_win(board, "O"):
                return i
            board[i] = " "
```

```
    # Check for blocking move
    for i in range(9):
        if board[i] == " ":
            board[i] = "X"
            if check_win(board, "X"):
                return i
            board[i] = " "

    # Try to take the center
    if board[4] == " ":
        return 4

    # Choose a random available spot
    available_moves = [i for i, cell in enumerate(board) if cell == " "]
    return random.choice(available_moves) if available_moves else None


def play_game():
  """Plays a game of Tic-Tac-Toe."""
  board = [" "] * 9
  current_player = "X"

  while True:
    print_board(board)
    if current_player == "X":
        move = get_player_move(board)
    else:
```

```
        move = get_computer_move(board)
        print(f"Computer chose: {move+1}")
    board[move] = current_player

    if check_win(board, current_player):
      print_board(board)
      print(current_player, "wins!")
      break
    elif check_draw(board):
      print_board(board)
      print("It's a draw!")
      break

    current_player = "O" if current_player == "X" else "X"

if __name__ == "__main__":
  play_game()
```

Output


play_game()
Enter your move (1-9): 1
Computer chose: 5
Enter your move (1-9): 7
Computer chose: 4
Enter your move (1-9): 6
Computer chose: 2


Computer chose: 2
Enter your move (1-9): 8
Computer chose: 9
Enter your move (1-9): 3
It's a draw!