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def hangman_game():
  words = ["monkey", "moon", "sunday", "programming"]
  word = random.choice(words)
  guessed_word = ["_"] * len(word)
  attempts = 6
  print("Welcome to Hangman!")
  print("Guess the word:")
  print(" ".join(guessed_word))
  while attempts > 0 and "_" in guessed_word:
    guess = input("\nEnter a letter: ").lower()
    if len(guess) != 1 or not guess.isalpha():
       print("Invalid input. Please enter a single letter.")
       continue
    if guess in word:
       print(f"Good job! '{guess}' is in the word.")
       for i in range(len(word)):
         if word[i] == guess:
            guessed_word[i] = guess
    else:
       attempts -= 1
       print(f"Wrong guess. You have {attempts} attempts left.")
    print(" ".join(guessed_word))
  if "_" not in guessed_word:
    print("\nCongratulations! You guessed the word:", word)
  else:
    print("\nGame Over. The word was:", word)
hangman_game()
```

import random