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import random
def hangman():
    # List of words for the game
    words = ["python", "programming", "hangman",
"algorithm", "coding"]
    word = random.choice(words)
    guessed_word = ["_"] * len(word)
    attempts = 6 # Maximum number of wrong attempts
    guessed_letters = set()
    print("Welcome to Hangman!")
    print("Guess the word:")
    print(" ".join(guessed word))
    while attempts > 0 and "_" in guessed_word:
        guess = input("Enter a letter: ").lower()
        if len(guess) != 1 or not guess.isalpha():
            print("Please enter a single letter.")
            continue
        if guess in guessed_letters:
            print(f"You already guessed '{guess}'.
Try a different letter.")
            continue
        guessed letters.add(guess)
        if guess in word:
            print(f"Good job! '{guess}' is in the
word.")
            for i, letter in enumerate(word):
                if letter == guess:
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guessed_word[i] = guess
else:
    attempts -= 1
    print(f"Wrong guess! '{guess}' is not in
the word.")
    print(f"You have {attempts} attempts
left.")

    print(" ".join(guessed_word))

    if "_" not in guessed_word:
        print("Congratulations! You guessed the
word:", word)
    else:
        print("Game Over! The word was:", word)

# Run the game
hangman()
```