

```
import random
```

```
def hangman():
```

```
    # Predefined list of 5 words
```

```
    words = ["python", "random", "game", "simple", "coding"]
```

```
    word = random.choice(words) # Choose a random word
```

```
    guessed_word = ["_"] * len(word) # Display word with underscores
```

```
    guessed_letters = [] # Keep track of guessed letters
```

```
    attempts = 6 # Maximum incorrect guesses allowed
```

```
    print("Welcome to Hangman!")
```

```
    print("Guess the word: ", " ".join(guessed_word))
```

```
    while attempts > 0 and "_" in guessed_word:
```

```
        guess = input("\nGuess a letter: ").lower()
```

```
        # Validate input
```

```
        if len(guess) != 1 or not guess.isalpha():
```

```
            print("Please enter a single alphabetic letter.")
```

```
            continue
```

```
        if guess in guessed_letters:
```

```
            print("You already guessed that letter.")
```

```
            continue
```

```
        guessed_letters.append(guess)
```

```
        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}' is not in the word. Attempts left: {attempts}")
```

```
    print("Word: ", " ".join(guessed_word))
```

```
    print("Guessed letters: ", " ".join(guessed_letters))
```

```
    # Win or lose
```

```
    if "_" not in guessed_word:
```

```
        print("\n🎉 Congratulations! You guessed the word:", word)
```

```
    else:
```

```
        print("\n😞 Game Over! The word was:", word)
```

```
# Run the game  
hangman()
```