HANGMAN GAME

```python
import random

# Predefined list of words
words = ["apple", "banana", "grapes", "mango", "orange"]
word = random.choice(words)
guessed_letters = []
attempts = 6

print("🎮 Welcome to Hangman!")
print("_ " * len(word))

while attempts > 0:
    guess = input("Guess a letter: ").lower()

    if not guess.isalpha() or len(guess) != 1:
        print("Please enter a single valid letter.")
        continue

    if guess in guessed_letters:
        print("You already guessed that letter.")
        continue

    guessed_letters.append(guess)

    if guess in word:
        print("✅ Good guess!")
    else:
        print("❌ Wrong guess!")
        attempts -= 1
        print(f"Attempts left: {attempts}")

    # Display the current state of the word
    display_word = ""
    for letter in word:
        if letter in guessed_letters:
            display_word += letter + " "
        else:
            display_word += "_ "
    print(display_word)

    # Check if the word is completely guessed
    if all(letter in guessed_letters for letter in word):
```

```
        print("🎉 Congratulations! You guessed the word:", word)
        break
else:
    print("💀 Game Over! The word was:", word)
```

TASK AUTOMATION WITH PYTHON

Method 1: Extract all email addresses from a .txt file

```
import re

input_file = 'input.txt'
output_file = 'emails.txt'

# Read text from file
with open(input_file, 'r') as file:
    text = file.read()

# Find all email addresses
emails = re.findall(r'[a-zA-Z0-9._%+-]+@[a-zA-Z0-9.-]+\.[a-zA-Z]{2,}', text)

# Save emails to a new file
with open(output_file, 'w') as file:
    for email in emails:
        file.write(email + '\n')

print(f"✅ {len(emails)} email(s) extracted to {output_file}.")
```

                    OR

Method 2: Scrape the title of a fixed webpage and save it

```python
import requests
import re

url = "https://example.com"  # Change this to your desired website

response = requests.get(url)

# Extract title using regex
title_match = re.search(r'<title>(.*?)</title>', response.text, re.IGNORECASE)

if title_match:
    title = title_match.group(1)
    with open("page_title.txt", "w") as file:
        file.write(title)
    print(f"✅ Page title saved: {title}")
else:
    print("❌ Title not found.")
```

BASIC CHATBOT

```python
def chatbot():
    print("🤖 Hello! I am your simple chatbot. Type 'bye' to exit.")

    while True:
        user_input = input("You: ").lower()

        if user_input == "hello":
            print("Bot: Hi!")
        elif user_input == "how are you":
            print("Bot: I'm fine, thanks! How can I help you?")
        elif user_input == "bye":
            print("Bot: Goodbye! Have a nice day 😊")
            break
        elif user_input == "what's your name":
            print("Bot: I'm ChatBot 1.0!")
        elif user_input == "help":
```

```python
            print("Bot: You can say 'hello', 'how are you', 'what's your name', or 'bye'")
        else:
            print("Bot: Sorry, I don't understand that.")


chatbot()
```