 TASK 1: Hangman Game

Goal: Simple text-based hangman game.

Python

```
import random


def hangman():
  words = ["apple", "banana", "grapes", "orange", "mango"]
  word = random.choice(words)
  guessed_letters = []
  attempts = 6
  print("Welcome to Hangman!")
  print("_ " * len(word))


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


     if len(guess) != 1 or not guess.isalpha():
        print("Please enter only one 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:
        attempts -= 1
        print(f"Wrong guess! {attempts} attempts left.")

    display_word = "".join([letter if letter in guessed_letters else "_" for letter in word])
    print("Word:", " ".join(display_word))

    if "_" not in display_word:
        print("\n Congratulations! You guessed the word:", word)
        break
else:
    print("\n You ran out of attempts. The word was:", word)

hangman()
```

 TASK 2: Stock Portfolio Tracker

Goal: Calculate total investment using predefined stock prices.

Python

```
# Simple Stock Portfolio Tracker

stock_prices = {
  "AAPL": 180,
  "TSLA": 250,
  "GOOG": 140,
  "MSFT": 330
}

total_investment = 0
portfolio = {}

while True:
  stock = input("\nEnter stock symbol (or 'done' to finish): ").upper()
  if stock == "DONE":
      break

  if stock in stock_prices:
      quantity = int(input(f"Enter number of shares for {stock}: "))
      investment = stock_prices[stock] * quantity
      total_investment += investment
      portfolio[stock] = portfolio.get(stock, 0) + quantity
```

```
  else:
      print("Stock not found in list!")

print("\nYour Portfolio Summary:")
for stock, qty in portfolio.items():
  print(f"{stock}: {qty} shares @ ${stock_prices[stock]} each")

print(f"\nTotal Investment Value: ${total_investment}")
```

 TASK 3: Task Automation Script

Example: Move all .jpg files from one folder to another.

Python

```
import os
import shutil

source_folder = "source_images"
destination_folder = "moved_images"

# Create folders if they don't exist
os.makedirs(source_folder, exist_ok=True)
os.makedirs(destination_folder, exist_ok=True)

for file in os.listdir(source_folder):
  if file.endswith(".jpg"):
```

```
    shutil.move(os.path.join(source_folder, file), os.path.join(destination_folder, file))
    print(f"Moved: {file}")

print("✅ All .jpg files moved successfully!")
```

✅ To test this, create folders named source_images and moved_images in your project directory.

✅ TASK 4: Basic Chatbot

Goal: Rule-based chatbot with predefined replies.

Python

```
def chatbot():
  print("Chatbot: Hi! I'm your assistant. Type 'bye' to exit.")

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

    if user in ["hello", "hi"]:
      print("Chatbot: Hello there! How are you?")
    elif user in ["how are you", "how are you?"]:
      print("Chatbot: I'm just a program, but I'm doing great! 😊")
    elif user in ["i'm fine", "fine", "good"]:
      print("Chatbot: Nice to hear that!")
    elif user == "bye":
      print("Chatbot: Goodbye! Have a great day! 👋")
```

```
            break
        else:
            print("Chatbot: Sorry, I didn't understand that.")


chatbot()
```