Python Internship Task 2: Stock Portfolio Tracker (Simplified)

# 🎯 Objective

Create a simple Python program where the user can enter stock names and quantities, and the program will calculate the total value of those stocks based on fixed prices.

# 🧠 Concepts Used

- Dictionary (to store stock prices)  
- Input and Output (to get data from user)  
- Loops and Conditions (while and if statements)  
- Basic File Handling (to optionally save the result)

# 💻 Python Code

# This program calculates total investment in selected stocks  
# Written in simple Python for beginner-level understanding  
  
import csv  
  
# Fixed stock prices  
stock\_prices = {  
 "AAPL": 180,  
 "TSLA": 250,  
 "GOOGL": 2700,  
 "AMZN": 3400,  
 "MSFT": 310  
}  
  
# Dictionary to store user-selected stocks  
portfolio = {}  
  
# Loop to get user input  
while True:  
 stock = input("Enter stock name (AAPL, TSLA, etc.) or 'done' to finish: ").upper()  
 if stock == 'DONE':  
 break  
 if stock in stock\_prices:  
 qty = int(input("Enter quantity: "))  
 if stock in portfolio:  
 portfolio[stock] += qty  
 else:  
 portfolio[stock] = qty  
 else:  
 print("Invalid stock name. Try again.")  
  
# Calculate total investment  
total = 0  
print("\n--- Summary ---")  
for stock, qty in portfolio.items():  
 price = stock\_prices[stock]  
 value = price \* qty  
 total += value  
 print(f"{stock}: {qty} × ${price} = ${value}")  
  
print(f"Total Investment: ${total}")  
  
# Ask user if they want to save the result  
save = input("Save result to CSV file? (yes/no): ").lower()  
if save == "yes":  
 with open("portfolio.csv", "w", newline="") as file:  
 writer = csv.writer(file)  
 writer.writerow(["Stock", "Quantity", "Price", "Total Value"])  
 for stock, qty in portfolio.items():  
 price = stock\_prices[stock]  
 value = qty \* price  
 writer.writerow([stock, qty, price, value])  
 writer.writerow(["Total", "", "", total])  
 print("Saved to 'portfolio.csv'")

# 📁 Suggested Folder Structure

CodeAlpha\_StockPortfolioTracker/  
│  
├── portfolio\_tracker.py  
├── portfolio.csv (will be created after running)  
├── README.md

# This program calculates total investment in selected stocks  
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import csv  
  
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# Dictionary to store user-selected stocks  
portfolio = {}  
  
# Loop to get user input  
while True:  
 stock = input("Enter stock name (AAPL, TSLA, etc.) or 'done' to finish: ").upper()  
 if stock == 'DONE':  
 break  
 if stock in stock\_prices:  
 qty = int(input("Enter quantity: "))  
 if stock in portfolio:  
 portfolio[stock] += qty  
 else:  
 portfolio[stock] = qty  
 else:  
 print("Invalid stock name. Try again.")  
  
# Calculate total investment  
total = 0  
print("\n--- Summary ---")  
for stock, qty in portfolio.items():  
 price = stock\_prices[stock]  
 value = price \* qty  
 total += value  
 print(f"{stock}: {qty} × ${price} = ${value}")  
  
print(f"Total Investment: ${total}")  
  
# Ask user if they want to save the result  
save = input("Save result to CSV file? (yes/no): ").lower()  
if save == "yes":  
 with open("portfolio.csv", "w", newline="") as file:  
 writer = csv.writer(file)  
 writer.writerow(["Stock", "Quantity", "Price", "Total Value"])  
 for stock, qty in portfolio.items():  
 price = stock\_prices[stock]  
 value = qty \* price  
 writer.writerow([stock, qty, price, value])  
 writer.writerow(["Total", "", "", total])  
 print("Saved to 'portfolio.csv'")  
  
import csv  
  
# Step 1: Stock prices (fixed values)  
stock\_prices = {  
 "AAPL": 180,  
 "TSLA": 250,  
 "GOOGL": 2700,  
 "AMZN": 3400,  
 "MSFT": 310  
}  
  
# Step 2: User adds stocks and quantity  
portfolio = {}  
while True:  
 stock = input("Enter stock symbol (or 'done' to finish): ").upper()  
 if stock == 'DONE':  
 break  
 if stock in stock\_prices:  
 quantity = int(input(f"How many shares of {stock}? "))  
 portfolio[stock] = portfolio.get(stock, 0) + quantity  
 else:  
 print("Invalid stock symbol. Try again.")  
  
# Step 3: Calculate total investment  
total = 0  
for stock, qty in portfolio.items():  
 price = stock\_prices[stock]  
 value = qty \* price  
 total += value  
 print(f"{stock}: {qty} × {price} = {value}")  
  
print("Total Investment:", total)  
  
# Step 4: Ask to save  
save = input("Do you want to save this in a file? (yes/no): ").lower()  
if save == 'yes':  
 with open("portfolio.csv", "w", newline='') as file:  
 writer = csv.writer(file)  
 writer.writerow(["Stock", "Quantity", "Price", "Total"])  
 for stock, qty in portfolio.items():  
 writer.writerow([stock, qty, stock\_prices[stock], qty \* stock\_prices[stock]])  
 writer.writerow(["TOTAL", "", "", total])  
 print("Saved to portfolio.csv")

Python Internship Task 3: Task Automation (Move JPG Files)

# 🎯 Objective

Automate a simple task using Python. This script moves all '.jpg' files from one folder to another folder.

# 🧠 Concepts Used

- File and Folder Handling  
- Using `os` and `shutil` libraries

# 💻 Python Code

import os  
import shutil  
  
# Define the source and destination folders  
source\_folder = "C:/Users/YourName/Downloads"  
destination\_folder = "C:/Users/YourName/Pictures/JPG\_Files"  
  
# Create destination folder if it doesn't exist  
if not os.path.exists(destination\_folder):  
 os.makedirs(destination\_folder)  
  
# Move .jpg files  
for filename in os.listdir(source\_folder):  
 if filename.endswith(".jpg"):  
 full\_path = os.path.join(source\_folder, filename)  
 shutil.move(full\_path, destination\_folder)  
 print(f"Moved: {filename}")  
  
print("All JPG files moved successfully.")

Python Internship Task 4: Basic Chatbot

# 🎯 Objective

Create a very simple chatbot that replies based on what the user types.

# 🧠 Concepts Used

- If-Elif Statements  
- Functions (basic)  
- Input/Output

# 💻 Python Code

def simple\_chatbot(user\_input):  
 if user\_input == "hello":  
 return "Hi there!"  
 elif user\_input == "how are you":  
 return "I'm just a Python bot, but I'm fine!"  
 elif user\_input == "bye":  
 return "Goodbye!"  
 else:  
 return "I don't understand that."  
  
# Chat loop  
print("Welcome to Simple Chatbot! Type 'bye' to exit.")  
while True:  
 user = input("You: ").lower()  
 if user == "bye":  
 print("Bot: Goodbye!")  
 break  
 reply = simple\_chatbot(user)  
 print("Bot:", reply)