

# LAB ASSIGNMENT-6.5

## 24BTCAIAIB16

2403A51410 – AMGOTH VIKAS NAYAK

### TASK – 1

```
LAB-1.1.py > Warehouse > add_product
1  # Defines the blueprint for a Product object
2  class Product:
3      def __init__(self, name, price, quantity):
4          self.name = name
5          self.price = price
6          self.quantity = quantity
7
8      def calculate_value(self):
9          return self.price * self.quantity
10
11 # Defines the blueprint for a Warehouse object
12 class Warehouse:
13     def __init__(self):
14         self.products = []
15
16     def add_product(self, product):
17         if isinstance(product, Product):
18             self.products.append(product)
19         else:
20             print("Error: Only Product objects can be added to the warehouse.")
21
22     def display_most_valuable_product(self):
23         if not self.products:
24             print("Warehouse is empty. No products to display.")
25             return
26
27         most_valuable = max(self.products, key=lambda p: p.calculate_value())
28         print(f"Most valuable product: {most_valuable.name} (Total Value: {most_valuable.calculate_value()})")
29
```

### TASK - 2

```
32
33 # 1. Create a Warehouse object
34 warehouse = Warehouse()
35
36 # 2. Create some Product objects
37 laptop = Product("Laptop", 1200, 5)
38 monitor = Product("Monitor", 300, 10)
39 keyboard = Product("Keyboard", 75, 20)
40
41 # 3. Add the products to the warehouse
42 warehouse.add_product(laptop)
43 warehouse.add_product(monitor)
44 warehouse.add_product(keyboard)
45
46 # 4. Display the most valuable product, which will print the output
47 warehouse.display_most_valuable_product()
48
```

### REVIEW:

Most of the code was generated by AI such as defining the class product and class warehouse, but the AI-assisted code was not complete.

I had to create objects like:

- warehouse = Warehouse()
- laptop = Product("Laptop", 1200, 5)
- monitor = Product("Monitor", 300, 10)

- keyboard = Product("Keyboard", 75, 20)
- warehouse.add\_product(laptop)
- warehouse.add\_product(monitor)
- warehouse.add\_product(keyboard)

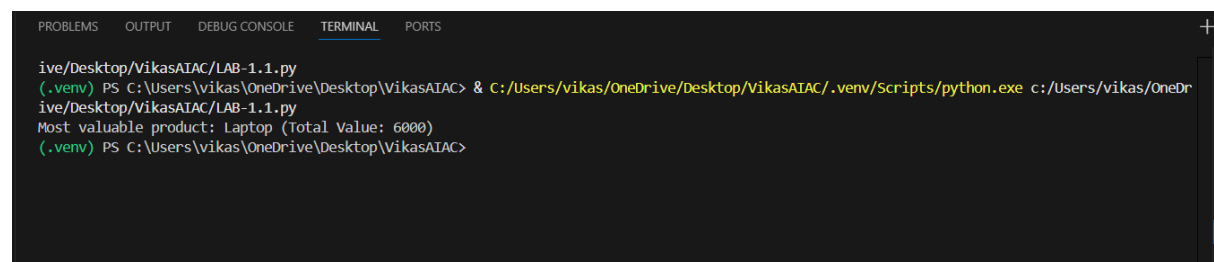
And after that I had to display them using:

- warehouse.display\_most\_valuable\_product()

In the above assignment Ai Done most of the code required for the operations like designing a class and methods to add or display the product

I had to write the code for creating objects.

## OUTPUT:



```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS
ive/Desktop/VikasAIAC/LAB-1.1.py
(.venv) PS C:\Users\vikas\OneDrive\Desktop\VikasAIAC> & C:/Users/vikas/OneDrive/Desktop/VikasAIAC/.venv/Scripts/python.exe c:/Users/vikas/OneDr
ive/Desktop/VikasAIAC/LAB-1.1.py
Most valuable product: Laptop (Total Value: 6000)
(.venv) PS C:\Users\vikas\OneDrive\Desktop\VikasAIAC>
```