✓ SE(AI&DS) - Bhavya Damani

```
class Product:
   def __init__(self, name, price, stock):
       self.name = name
       self.price = price
       self.stock = stock
    def update_stock(self, quantity):
        self.stock += quantity
    def __str__(self):
        return f"Product: {self.name}, Price: ₹{self.price:.2f}, Stock: {self.stock}"
def add_product(products):
   name = input("Enter product name: ")
   price = float(input("Enter product price: "))
   stock = int(input("Enter product stock: "))
   product = Product(name, price, stock)
   products[name] = product
   print("Product added successfully!")
def update_stock(products):
   name = input("Enter product name to update: ")
   if name in products:
        quantity = int(input("Enter quantity to add/remove: "))
       products[name].update_stock(quantity)
       print("Stock updated successfully!")
    else:
       print("Product not found.")
def view_product(products):
    name = input("Enter product name: ")
    if name in products:
       print(products[name])
    else:
       print("Product not found.")
def main():
   products = {}
    while True:
       print("\n1. Add a new product")
       print("2. Update stock of an existing product")
       print("3. View product details")
       print("4. Exit")
       choice = input("Enter your choice: ")
        if choice == '1':
           add_product(products)
        elif choice == '2':
           update_stock(products)
        elif choice == '3':
           view_product(products)
        elif choice == '4':
            print("Exiting the system. Goodbye!")
        else:
           print("Invalid choice, please try again.")
if __name__ == "__main__":
   main()
₹
     1. Add a new product
     2. Update stock of an existing product
     3. View product details
     4. Exit
     Enter your choice: 1
     Enter product name: Bag
     Enter product price: 400
     Enter product stock: 30
    Product added successfully!
     1. Add a new product
     2. Update stock of an existing product
     3. View product details
     4. Exit
     Enter your choice: 1
     Enter product name: Bottle
```

Enter product price: 200 Enter product stock: 20 Product added successfully!

1. Add a new product

- 2. Update stock of an existing product
- 3. View product details

4. Exit

Enter your choice: 2
Enter product name to update: Bag Enter quantity to add/remove: -20 Stock updated successfully!

1. Add a new product

2. Update stock of an existing product

3. View product details

4. Exit

Enter your choice: 3 Enter product name: Bag

Product: Bag, Price: ₹400.00, Stock: 10

1. Add a new product

2. Update stock of an existing product

3. View product details

4. Exit

Enter your choice: 3 Enter product name: Bottle

Product: Bottle, Price: ₹200.00, Stock: 20

1. Add a new product

2. Update stock of an existing product

3. View product details

4. Exit

Enter your choice: 4

Exiting the system. Goodbye!

Start coding or generate with AI.