```
In [ ]: } class Product:
              def __init__(self, name, price, stock):
                  self.name = name
          self.price = float(price)
          self.stock = int(stock)
                  def update_stock(self,
          quantity):
                  self.stock += quantity
         print("Stock updated successfully!")
                                            return f"Product: {self.name}, Price:
                  def str (self):
         ${self.price}, Stock: {self.stock
          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':
                      name = input("Enter product name: ")
         price = input("Enter product price: ")
         stock = input("Enter product stock: ")
                                  if name
          in products:
                          print("Product already exists!")
         else:
                          products[name] = Product(name, price, stock)
          print("Product added successfully!")
                          elif choice
          == '2':
                      name = input("Enter product name to update: ")
         if name in products:
                          quantity = int(input("Enter quantity to add/remove: "))
          products[name].update_stock(quantity)
                                                             else:
                          print("Product not found!")
                          elif choice
          == '3':
                      name = input("Enter product name: ")
         if name in products:
                          print(products[name])
          else:
                          print("Product not found!")
                          elif choice
          == '4':
                      print("Exiting the system. Goodbye!")
          break
          else:
                      print("Invalid choice! Please enter a number between 1 and 4.")
```

```
if __name__ == "__main__":
main()
```

- 1. Add a new product
- 2. Update stock of an existing product
- 3. View product details
- 4. ExitProduct added successfully!
- 1. Add a new product
- 2. Update stock of an existing product
- 3. View product details
- 4. ExitStock updated successfully!
- 1. Add a new product
- 2. Update stock of an existing product
- 3. View product details
- 4. ExitProduct: prestige builder, Price: \$2000000.0,
 Stock: 32
- 1. Add a new product
- 2. Update stock of an existing product
- 3. View product details
- 4. Exit

```
In [ ]:
In [ ]:
```