CODE:

```
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}"
products={}
while True:
 print("\n**Menu Options*")
 print("1.Add a new Product")
 print("2.Update the stock of an existing product")
 print("3.Display the details of a product")
 print("4.Exit the program")
 print("")
 choice = input("Enter your choice: (1-4)")
 if choice == '1':
  name = input("Enter product name: ")
  if name in products:
    print("Product already int the Stock!.")
    break
  price = float(input("Enter product price: "))
  stock = int(input("Enter product stock: "))
  products[name] =Product(name, price, stock)
  print("Product added successfully!")
 elif choice == '2':
  name = input("Enter product name to update: ")
  if name not in products:
    print("Product not found in the Stock!.")
  quantity = int(input("Enter quantity to add/(-remove):"))
  products[name].update stock(quantity)
  print("Stock updated successfully!")
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elif choice == '3':
  name = input("Enter product name: ")
  if name not in products:
    print("Product not found in the Stock!")
    break
  print(products[name])

elif choice == '4':
  print("Exiting")
  break

else:
  print("Invalid Input.Please Enter choice from (1-4)")
```

Output:

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*****Menu Options*****
1.Add a new Product
2.Update the stock of an existing product
3.Display the details of a product
4.Exit the program
***********
Enter your choice: (1-4)1
Enter product name: Laptop
Enter product price: 50000
Enter product stock: 7
Product added successfully!
*****Menu Options*****
1.Add a new Product
2.Update the stock of an existing product
3.Display the details of a product
4.Exit the program
**********
Enter your choice: (1-4)3
Enter product name: Laptop
Product: Laptop, Price: $50000.00, Stock: 7
*****Menu Options*****
1.Add a new Product
2.Update the stock of an existing product
3.Display the details of a product
4.Exit the program
*********
Enter your choice: (1-4)2
Enter product name to update: Laptop
Enter quantity to add/(-remove):2
Stock updated successfully!
```

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4.Exit the program
********
Enter your choice: (1-4)3
Enter product name: Laptop
Product: Laptop, Price: $50000.00, Stock: 7
*****Menu Options*****
1.Add a new Product
2.Update the stock of an existing product
3.Display the details of a product
Enter your choice: (1-4)2
Enter product name to update: Laptop
Enter quantity to add/(-remove):2
Stock updated successfully!
*****Menu Options*****
1.Add a new Product
2.Update the stock of an existing product
3.Display the details of a product
4.Exit the program
********
Enter your choice: (1-4)3
Enter product name: Laptop
Product: Laptop, Price: $50000.00, Stock: 9
*****Menu Options*****
1.Add a new Product
2.Update the stock of an existing product
3.Display the details of a product
Exit the program
********
Enter your choice: (1-4)
```