Problem 1. Using List Collection type. Create a program that will allow the user to perform

The following functions: (add, update, search, delete, display, and sort) items in a list:

Sample Code:

```python
item = []

def adding(item):
    print("\nAdd Store Products (Type 'x' to stop):")
    while True:
        product = input("Enter the product name: ")
        if product.lower() == "x":
            break
        item.append(product)
        print("Product successfully added.")
    return item

def searching(item):
    product = input("Enter the product to be searched: ")
    count = item.count(product)
    if product in item:
        print("Product Found.")
        print(f"Total instances of '{product}': {count}")
    else:
        print("Product Not Found.")
    return item

def removing(item):
    product = input("Enter the product to be removed: ")
    if product in item:
        item.remove(product)
        print("Product Found and Deleted.")
    else:
        print("Product Not Found - Deletion Unsuccessful.")
    return item

def viewing(item):
    choice = input("Sort Products\n1. Alphabetically (A-Z)\n2. Reverse Alphabetically (Z-A)\nEnter your choice: ")

    if choice == "1":
        sorted_items = sorted(item)
    elif choice == "2":
        sorted_items = sorted(item, reverse=True)
    else:
        print("Invalid input. Defaulting to alphabetical order (A-Z).")
        sorted_items = sorted(item)
    print("\n--- YOUR PRODUCTS ---")
    for product in sorted_items:
        print(f" - {product}")
    return item
```

```python
def main():
    while True:
        print("\n---------PRODUCT STORAGE----------")
        print("----------------------------------")
        print("| [MENU]                          |")
        print("| 1 - Add items                   |")
        print("| 2 - Search for an item          |")
        print("| 3 - Remove an item              |")
        print("| 4 - View all items              |")
        print("| 0 - Exit program                |")
        print("----------------------------------")

        choice = input("Pick one (0 to quit): ")
        if choice == "1":
            adding(item)
        elif choice == "2":
            searching(item)
        elif choice == "3":
            removing(item)
        elif choice == "4":
            viewing(item)
        elif choice == "0":
            print("Thankyou and Come Again!")
            break
        else:
            print("Invalid Input! Please Try Again.")

main()
```

Sample Output:

```
----------PRODUCT STORAGE----------
-----------------------------------
| [MENU]                           |
| 1 - Add items                    |
| 2 - Search for an item           |
| 3 - Remove an item               |
| 4 - View all items               |
| 0 - Exit program                 |
-----------------------------------
Pick one (0 to quit): 1

Add Store Products (Type 'x' to stop):
Enter the product name: apple
Product successfully added.
Enter the product name: mango
Product successfully added.
Enter the product name: orange
Product successfully added.
Enter the product name: bayabas
Product successfully added.
Enter the product name: kamias
Product successfully added.
Enter the product name: carrot
Product successfully added.
Enter the product name: x
```

```
----------PRODUCT STORAGE----------
-----------------------------------
| [MENU]                           |
| 1 - Add items                    |
| 2 - Search for an item           |
| 3 - Remove an item               |
| 4 - View all items               |
| 0 - Exit program                 |
-----------------------------------
Pick one (0 to quit): 2
Enter the product to be searched: sili
Product Not Found.

----------PRODUCT STORAGE----------
-----------------------------------
| [MENU]                           |
| 1 - Add items                    |
| 2 - Search for an item           |
| 3 - Remove an item               |
| 4 - View all items               |
| 0 - Exit program                 |
-----------------------------------
Pick one (0 to quit): 2
Enter the product to be searched: kamias
Product Found.
Total instances of 'kamias': 1
```

```
----------PRODUCT STORAGE----------
-----------------------------------
| [MENU]                           |
| 1 - Add items                    |
| 2 - Search for an item           |
| 3 - Remove an item               |
| 4 - View all items               |
| 0 - Exit program                 |
-----------------------------------
Pick one (0 to quit): 3
Enter the product to be removed: bayabas
Product Found and Deleted.
```

```
----------PRODUCT STORAGE----------
-----------------------------------
| [MENU]                           |
| 1 - Add items                    |
| 2 - Search for an item           |
| 3 - Remove an item               |
| 4 - View all items               |
| 0 - Exit program                 |
-----------------------------------
Pick one (0 to quit): 4
Sort Products
1. Alphabetically (A-Z)
2. Reverse Alphabetically (Z-A)
Enter your choice: 1

--- YOUR PRODUCTS ---
- apple
- carrot
- kamias
- mango
- orange
```

```
----------PRODUCT STORAGE----------
-----------------------------------
| [MENU]                           |
| 1 - Add items                    |
| 2 - Search for an item           |
| 3 - Remove an item               |
| 4 - View all items               |
| 0 - Exit program                 |
-----------------------------------
Pick one (0 to quit): 0
Thankyou and Come Again!
```