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# Midterm Lab Task 3 - Python List Collections
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items = []
```

```
def add_items():  
    print("\n=== Add Items ===")  
    while True:  
        item = input("Enter item to add (or 'x' to stop): ")  
        if item.lower() == 'x':  
            break  
        items.append(item)  
    print("Items added successfully!\n")
```

```
def search_item():  
    print("\n=== Search Item ===")  
    item = input("Enter item to search: ")  
    count = items.count(item)  
    if count > 0:  
        print(f"'{item}' found {count} time(s) in the list.\n")  
    else:  
        print(f"'{item}' not found in the list.\n")
```

```
def remove_item():  
    print("\n=== Remove Item ===")  
    item = input("Enter item to remove: ")  
    if item in items:  
        items.remove(item)  
        print(f"Item '{item}' found and deleted.\n")  
    else:  
        print(f"Item '{item}' not found - deletion unsuccessful.\n")
```

```
def view_items():  
    print("\n=== View Items ===")  
    if not items:  
        print("The list is empty.\n")  
    return
```

```
choice = input("Sort order (A-Z / Z-A): ").upper()  
if choice == "A-Z":  
    sorted_items = sorted(items)  
elif choice == "Z-A":  
    sorted_items = sorted(items, reverse=True)  
else:  
    print("Invalid choice, showing unsorted list.")  
    sorted_items = items
```

```
print("Items in the list:")  
for item in sorted_items:  
    print("-", item)  
print()
```

```
def menu():
    while True:
        print("==== MENU ====")
        print("1 - Add Items")
        print("2 - Search for an Item")
        print("3 - Remove an Item")
        print("4 - View all items (Sorted A-Z | Z-A)")
        print("0 - Exit program")
        choice = input("Pick one [0 to quit]: ")

        if choice == "1":
            add_items()
        elif choice == "2":
            search_item()
        elif choice == "3":
            remove_item()
        elif choice == "4":
            view_items()
        elif choice == "0":
            print("Exiting program... Goodbye!")
            break
        else:
            print("Invalid choice. Please try again.\n")

# Run the program
menu()
```

```

Pick one [0 to quit]: 1

=== Add Items ===
Enter item to add (or 'x' to stop): Fruit
Enter item to add (or 'x' to stop): x
Items added successfully!

===== MENU =====
1 - Add Items
2 - Search for an Item
3 - Remove an Item
4 - View all items (Sorted A-Z | Z-A)
0 - Exit program
Pick one [0 to quit]: 2

=== Search Item ===
Enter item to search: Fruit
'Fruit' found 1 time(s) in the list.

===== MENU =====
1 - Add Items
2 - Search for an Item
3 - Remove an Item
4 - View all items (Sorted A-Z | Z-A)
0 - Exit program
Pick one [0 to quit]: 3

=== Remove Item ===
Enter item to remove: Fruit
Item 'Fruit' found and deleted.

===== MENU =====
1 - Add Items
2 - Search for an Item
3 - Remove an Item
4 - View all items (Sorted A-Z | Z-A)
0 - Exit program
Pick one [0 to quit]: 4

=== View Items ===
The list is empty.

===== MENU =====
1 - Add Items
2 - Search for an Item
3 - Remove an Item
4 - View all items (Sorted A-Z | Z-A)
0 - Exit program
Pick one [0 to quit]: 0
Exiting program... Goodbye!

```