Grocery List Manager

- Create a list of groceries.
- Add a new item using append().
- Insert an item at a specific position using insert().
- Remove an item using remove().
- Sort the list alphabetically.

```
grocery_list = ["Milk", "Bread", "Butter"]

# Adding a new item
        grocery_list.append("Eggs")

# Inserting at a specific position (adding "Apples" at index 1)
        grocery_list.insert(1, "Apples")

# Removing an item
        grocery_list.remove("Butter")

# Sorting the list alphabetically
        grocery_list.sort()

print("Updated Grocery List:", grocery_list)
```

Real-time Use: Helps in managing a shopping list efficiently

Task Manager

- Create a list of tasks.
- Add a new task using append().
- Insert a high-priority task at the beginning using insert().
- Remove a completed task using remove().
- Sort tasks alphabetically.

```
tasks = ["Complete project", "Go to gym", "Read book"]

# Adding a new task
        tasks.append("Call Mom")

# Inserting a high-priority task
        tasks.insert(0, "Pay Bills")

# Removing a completed task
        tasks.remove("Go to gym")

# Sorting tasks
        tasks.sort()

print("Updated Task List:", tasks)
```

Real-time Use: Helps in managing daily tasks and prioritizing them.

Store book details (title, author, year) in a tuple and display them.

```
# Tuple with book details
        book = ("Atomic Habits", "James Clear", 2018)

# Display book information
        print("Title:” book[0])
        print("Author:” book[1])
        print("Year:“ book[2])
```

A company maintains a dictionary of employee names and their salaries. The HR team needs to update a salary and display the updated list.

```
# Dictionary of employee salaries
```

```
employee_salaries = {
    "John": 5000,
    "Emily": 6000,
    "David": 5500
}

# Update salary for an employee
        employee_salaries["Emily"] = 6500

# Display updated salaries
        print("Updated Employee Salaries:", employee_salaries)
```

Add a New Contact to a Phonebook

- Create a dictionary with some contacts.
- Add a new contact to the dictionary.

```
# Phonebook dictionary
        phonebook = {
            "Alice": "123-456-7890",
            "Bob": "987-654-3210"
        }

# Add a new contact
        phonebook["Charlie"] = "555-666-7777"

        print("Updated Phonebook:", phonebook)
```

Displaying daily temperatures from a weather report

```
temperatures = [25, 27, 30, 29, 28]
for temp in temperatures:
    print("Today's temperature: °C",temp)
```

Sending messages to multiple users

```
users = ["Alice", "Bob", "Charlie"]
for user in users:
    print("Sending message to”,user)
```

SFinding highest temperature in a list

```
temperatures = [25, 30, 35, 40, 28, 42]
for temp in temperatures:
        if temp > 35:
                print("Warning! High temperature detected:", temp, "°C")
```

Checking If Water is Boiling

```
        temperature = 95
        if temperature >= 100:
            print("Water is boiling.")
        else:
            print("Water is not boiling yet.")
```