

```
Python 3.14.2 (tags/v3.14.2:df79316, Dec  5 2025, 17:18:21) [MSC v.1944 64 bit (AMD64)] on win32
Enter "help" below or click "Help" above for more information.
>>> a={1,2,3,4}
>>> b={3,4,5,6}
>>> a.add(7)
>>> a
{1, 2, 3, 4, 7}
>>> a.copy()
{1, 2, 3, 4, 7}
>>> a.union(b)
{1, 2, 3, 4, 5, 6, 7}
>>> a.difference(b)
{1, 2, 7}
>>> b.difference(a)
{5, 6}
>>> a.symmetric_difference(b)
{1, 2, 5, 6, 7}
>>> a.discard(5)
>>> a
{1, 2, 3, 4, 7}
>>> a.update([20,30])
>>> a
{1, 2, 3, 4, 7, 20, 30}
>>> a.difference_update
<built-in method difference_update of set object at 0x0000028A29132180>
>>> a.difference_update()
>>> a
{1, 2, 3, 4, 7, 20, 30}
>>> a.isdisjoint(b)
False
>>> a.issubset(b)
False
>>> a.issuperset(b)
False
```

IDLE Shell - C:/Users/Vaishnavi PM/OneDrive/Lab3 (3.1).py (3.14.2)

File Edit Shell Debug Options Window Help

```
Python 3.14.2 (tags/v3.14.2:df79316, Dec 5 2025, 17:18:21) [MSC v.1944 64 bit (AMD64)] on win32
Enter "help" below or click "Help" above for more information.
>>> a={1,2,3,4}
>>> b={3,4,5,6}
>>> a.intersection()
{1, 2, 3, 4}
>>> a.intersection_update()
>>> a
{1, 2, 3, 4}
>>> a.pop()
1
>>> |
```

```
def list_operations():
    my_list = []

    while True:
        print("\nList Operations:")
        print("1. Insert an element")
        print("2. Delete an element")
        print("3. Find an element")
        print("4. Display list")
        print("5. Exit")

        choice = int(input("Enter your choice: "))

        if choice == 1:
            element = input("Enter element to insert: ")
            my_list.append(element)
            print(f"Element '{element}' inserted.")

        elif choice == 2:
            element = input("Enter element to delete: ")
            if element in my_list:
                my_list.remove(element)
                print(f"Element '{element}' deleted.")
            else:
                print(f"Element '{element}' not found.")

        elif choice == 3:
            element = input("Enter element to find: ")
            if element in my_list:
                print(f"Element '{element}' found.")
            else:
                print(f"Element '{element}' not found.")

        elif choice == 4:
            print("Current list:", my_list)

        elif choice == 5:
            print("Exiting program...")
            break

        else:
            print("Invalid choice! Please try again.")

# Calling the function
list_operations()
```

```
List Operations:
```

- 1. Insert an element
- 2. Delete an element
- 3. Find an element
- 4. Display list
- 5. Exit

```
Enter your choice: 4
```

```
Current list: [10, 20, 30]
```

```
List Operations:
```

- 1. Insert an element
- 2. Delete an element
- 3. Find an element
- 4. Display list
- 5. Exit

```
Enter your choice: 1
```

```
Enter element to insert: 40,50
```

```
Element '40,50' inserted.
```

```
List Operations:
```

- 1. Insert an element
- 2. Delete an element
- 3. Find an element
- 4. Display list
- 5. Exit

```
Enter your choice: 2
```

```
Enter element to delete: 40,50
```

```
Element '40,50' deleted.
```

```
List Operations:
```

- 1. Insert an element
- 2. Delete an element
- 3. Find an element
- 4. Display list
- 5. Exit

```
Enter your choice: 1
```

```
Enter element to insert: 60
```

```
Element '60' inserted.
```

```
List Operations:
```

- 1. Insert an element
- 2. Delete an element
- 3. Find an element
- 4. Display list
- 5. Exit

```
Enter your choice: 3
```

```
File Edit Format Run Options Window Help
def list_operations():
    my_list = [10,20,30]

    while True:
        print("\nList Operations:")
        print("1. Insert an element")
        print("2. Delete an element")
        print("3. Find an element")
        print("4. Display list")
        print("5. Exit")

        choice = int(input("Enter your choice: "))

        match choice:
            case 1:
                element = input("Enter element to insert: ")
                my_list.append(element)
                print(f"Element '{element}' inserted.")

            case 2:
                element = input("Enter element to delete: ")
                if element in my_list:
                    my_list.remove(element)
                    print(f"Element '{element}' deleted.")
                else:
                    print(f"Element '{element}' not found.")

            case 3:
                element = input("Enter element to find: ")
                if element in my_list:
                    print(f"Element '{element}' found.")
                else:
                    print(f"Element '{element}' not found.")

            case 4:
                print("Current list:", my_list)

            case 5:
                print("Exiting program...")
                break

            case _:
                print("Invalid choice! Please try again.")

# Call the function
list_operations()
```

```
1. Insert an element  
2. Delete an element  
3. Find an element  
4. Display list  
5. Exit
```

Enter your choice: 4

Current list: [10, 20, 30]

List Operations:

```
1. Insert an element  
2. Delete an element  
3. Find an element  
4. Display list  
5. Exit
```

Enter your choice: 1

Enter element to insert: 40,50

Element '40,50' inserted.

List Operations:

```
1. Insert an element  
2. Delete an element  
3. Find an element  
4. Display list  
5. Exit
```

Enter your choice: 4

Current list: [10, 20, 30, '40,50']

List Operations:

```
1. Insert an element  
2. Delete an element  
3. Find an element  
4. Display list  
5. Exit
```

Enter your choice: 2

Enter element to delete: 40,50

Element '40,50' deleted.

List Operations:

```
1. Insert an element  
2. Delete an element  
3. Find an element  
4. Display list  
5. Exit
```

Enter your choice: 1

Enter element to insert: 60

Element '60' inserted.