

```
[1]: a={1,2,3,4}  
a
```

```
[1]: {1, 2, 3, 4}
```

```
[2]: b={3,4,5,6}  
b
```

```
[2]: {3, 4, 5, 6}
```

```
[4]: a.add(7)  
a
```

```
[4]: {1, 2, 3, 4, 7}
```

```
[5]: c=a.copy()  
c
```

```
[5]: {1, 2, 3, 4, 7}
```

```
[6]: a
```

```
[6]: {1, 2, 3, 4, 7}
```

```
[7]: a.union(b)
```

```
[7]: {1, 2, 3, 4, 5, 6, 7}
```

```
[9]: a.intersection(b)
```

```
[9]: {3, 4}
```

```
[10]: a.difference(b)
```

```
[10]: {1, 2, 7}
```

```
[11]: b.difference(a)
```

```
[11]: {5, 6}
```

```
[13]: a.symmetric_difference(b)
```

```
[13]: {1, 2, 5, 6, 7}
```

```
[18]: a.discard(2)
a
```

```
[18]: {1, 3, 4, 7, 20, 30}
```

```
[19]: a.update([20,30])
a
```

```
[19]: {1, 3, 4, 7, 20, 30}
```

```
a.difference_update
```

```
[20]: a
```

```
[20]: {1, 3, 4, 7, 20, 30}
```

```
[21]: b
```

```
[21]: {3, 4, 5, 6}
```

```
[22]: a.isdisjoint(b)
```

```
[22]: False
```

```
[23]: a.issubset(b)
```

```
[23]: False
```

```
[24]: a.issuperset(b)
```

```
[24]: False
```

```
[32]: def list_operation():  
    my_list = []  
  
    while True:  
        print("\nList Operation:")  
        print("1. Insert an element")  
        print("2. Delete an element")  
        print("3. Find an element")  
        print("4. Display the 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: ")
```

```

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(f"Current list: {my_list}")

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

else:
    print("Invalid choice, please try again")

```

list_operation()

List Operation:

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

Enter your choice: 1

Enter element to insert: 11

Element '11' inserted

List Operation:

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

Enter your choice: 2

Enter element to delete: 12

Element '12' not found

List Operation:

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

Enter your choice: 5

Exiting program...