

```
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: 20
Element '20 ' not found.
```

```
List Operations:
1. Insert an element
2. Delete an element
3. Find an element
4. Display list
5. Exit
Enter your choice: 3
Enter element to find: 30
Element '30' not found.
```

```
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 ']
```

```
List Operations:
1. Insert an element
2. Delete an element
3. Find an element
4. Display list
5. Exit
Enter your choice: 5
Exiting program...
```



```
[31]: a={1,2,3,4}
      b={3,4,5,6}
      a
```

```
[31]: {1, 2, 3, 4}
```

```
[32]: b
```

```
[32]: {3, 4, 5, 6}
```

```
[34]: a.add(7)
      print(a)

      {1, 2, 3, 4, 7}
```

```
[35]: c=a.copy
      print(a)

      {1, 2, 3, 4, 7}
```

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

```
[36]: {1, 2, 3, 4, 5, 6, 7}
```

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

```
[37]: {3, 4}
```

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

```
[38]: {1, 2, 7}
```

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

```
[39]: {1, 2, 5, 6, 7}
```

```
[38]: {1, 2, 7}
```

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

```
[39]: {1, 2, 5, 6, 7}
```

```
[41]: a.discard(5)  
print(a)
```

```
{1, 2, 3, 4, 7}
```

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

```
{1, 2, 3, 4, 7, 20, 30}
```

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

```
[44]: {1, 2, 7, 20, 30}
```

```
[45]: a
```

```
[45]: {1, 2, 3, 4, 7, 20, 30}
```

```
[46]: b
```

```
[46]: {3, 4, 5, 6}
```

```
[ ]:
```

```
[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: "))

        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.")
```

```

        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.")

list_operations()

```

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: 10

Element '10' inserted.

List Operations:

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

```
[*]: def list_operations():
    my_list=[]
    while True:
        print("\nlist operation:")
        print("1.insert an element")
        print("2.deletion an element")
        print("3.find an element")
        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.")
        else:
            print("invalid choice! please try again.")
            break
    list_operations()
```

```
    else:
        print("invalid choice! please try again.")
        break
list_operations()
```

```
list operation:
1.insert an element
2.deletion an element
3.find an element
enter your choice: 1
enter element to insert: 10
element'10'inserted.
```

```
list operation:
1.insert an element
2.deletion an element
3.find an element
enter your choice: 2
enter element to delete: 20
element'20'not found.
```

```
list operation:
1.insert an element
2.deletion an element
3.find an element
enter your choice: 3
enter element to find: 30
element'30'not found.
```