

WRITE A python programming to create a list,a dictionary,qnd a set.perform basic operations like adding,removing,and modifying elemnts

```
# Creating a list, dictionary, and set
```

```
my_list = [1, 2, 3, 4]
```

```
my_dict = {'a': 1, 'b': 2, 'c': 3}
```

```
my_set = {1, 2, 3}
```

```
# List operations
```

```
print("Original list:", my_list)
```

```
# Adding an element to the list
```

```
my_list.append(5)
```

```
print("List after adding an element:", my_list)
```

```
# Removing an element from the list
```

```
my_list.remove(2)
```

```
print("List after removing an element:", my_list)
```

```
# Modifying an element in the list
```

```
my_list[1] = 10
```

```
print("List after modifying an element:", my_list)
```

```
# Dictionary operations
```

```
print("\nOriginal dictionary:", my_dict)
```

```
# Adding a new key-value pair to the dictionary
```

```
my_dict['d'] = 4
```

```
print("Dictionary after adding a key-value pair:", my_dict)
```

```
# Removing a key-value pair from the dictionary
```

```
del my_dict['b']  
print("Dictionary after removing a key-value pair:", my_dict)
```

```
# Modifying a value in the dictionary  
my_dict['a'] = 10  
print("Dictionary after modifying a value:", my_dict)
```

```
# Set operations  
print("\nOriginal set:", my_set)
```

```
# Adding an element to the set  
my_set.add(4)  
print("Set after adding an element:", my_set)
```

```
# Removing an element from the set  
my_set.discard(2)  
print("Set after removing an element:", my_set)
```

```
# Since sets are unordered, there's no concept of modifying an element directly  
# Instead, you can remove an element and add another  
my_set.discard(3)  
my_set.add(5)  
print("Set after modifying elements (remove 3 and add 5):", my_set)
```