UNDERSTANDING BASIC DATA TYPES SUCH AS LIST, DICTIONARY AND SET USING BASIC OPERATIONS:

- *LIST*

```
# Creating an empty list
list1 = []


# Adding elements into the list
list1.append("apple")
list1.append("banana")
list1.append("orange")
list1.append("grapes")
list1.append("berry")


# Removing the elements from the list
list1.remove("banana")
del list1[2]


# Modifying a value in the list
list1[0] = "mango"


# Printing elements of the list
print("Elements from list: ",list1)
```

```
    Elements from list:  ['mango', 'orange', 'berry']
```

- *DICTIONARY*

```
# Create an empty dictionary
dict1 = {}
dict2 = {'1' : 'apple', '2': 'banana','3': 'orange'}



# Adding key-value pairs to the dictionary
dict1["apple"] = 5
dict1["banana"] = 3
dict1["orange"] = 7

dict2["4"] = "grapes"
dict2["5"] = "berry"


# Removing the elements from the dictionary
del dict1["banana"]

del dict2["3"]


# Modifying the values in the dictionary
dict1["apple"] = 10

dict2["2"] = "mango"


# Printing elements of the dictionary
print("Elements from dictionary1 : ",dict1)

print("Elements from dictionary2 : ", dict2)
```

```
    Elements from dictionary1 :  {'apple': 10, 'orange': 7}
    Elements from dictionary2 :  {'1': 'apple', '2': 'mango', '4': 'grapes', '5': 'berry'}
```

- *SET*

```
# Creating an empty set
set1 = set()


# Addig elements to the set
set1.add("apple")
set1.add("banana")
set1.add("orange")
set1.add("grapes")
set1.add("berry")


# Removing the elements from the set
set1.remove("banana")
set1.remove("orange")


# Modifying elements in the set
#        discarding , adding elements
set1.discard(2)
set1.add("mango")

#        converting to a list to modify, then converting back to a set
temp_list = list(set1)
temp_list[0] = "pear"
set1 = set(temp_list)


# Priting elements of the set
print("Elements from Set:", set1)
```

```
    Elements from Set: {'berry', 'pear', 'mango', 'apple'}
```