

```
In [1]: test_list=[1,5,3,6,3,5,6,1]
print("The original list is:" +str(test_list))
test_list=list(set(test_list))
print("the list after removing duplicates" +str(test_list))
```

The original list is:[1, 5, 3, 6, 3, 5, 6, 1]  
the list after removing duplicates[1, 3, 5, 6]

```
In [3]: list1=[1,3,5,7,9]
list2=[1,2,4,6,7,8]
diff_list1_list2 = list(set(list1)-set(list2))
diff_list2_list1 = list(set(list2)-set(list1))
total_diff = diff_list1_list2+diff_list2_list1
print(total_diff)
```

[9, 3, 5, 8, 2, 4, 6]

```
In [4]: import collections
my_list=[10,10,10,10,20,20,20,20,40,40,50,50,30]
print("Original list:",my_list)
ctr=collections.Counter(my_list)
print("Frequency of the elements in the list: ",ctr)
```

Original list: [10, 10, 10, 10, 20, 20, 20, 20, 40, 40, 50, 50, 30]  
Frequency of the elements in the list: Counter({10: 4, 20: 4, 40: 2, 50: 2, 30: 1})

```
In [6]: from collections import Counter
color1=["red","orange","green","blue","white"]
color2=["black","yellow","green","blue"]
counter1= Counter(color1)
counter2= Counter(color2)
print("Color1-Color2: ",list(counter1-counter2))
print("Color2-Color1: ",list(counter2-counter1))
```

Color1-Color2: ['red', 'orange', 'green', 'white']  
Color2-Color1: ['black', 'yellow', 'green']

In [ ]: