

Q1

```
In [30]: a=[2,4,3,5,7]#treating elements are unique convert into set
b=[4,3]
c=[3,7]
set(b).issubset(set(a))
set(c).issubset(set(a))
print('is sublist',(a,b))
print('is sublist',(a,c))
```

```
is sublist ([2, 4, 3, 5, 7], [4, 3])
is sublist ([2, 4, 3, 5, 7], [3, 7])
```

Q2

```
In [32]: color1 = "Red", "Green", "Orange", "White"
color2 = "Black", "Green", "White", "Pink"
print(set(color1) & set(color2))
```

```
{'White', 'Green'}
```

Q3 Write a Python program to get the difference between the two lists

```
In [34]: list1 = [1, 2, 3, 4]
list2 = [1, 2]

d=Differenc_of_list1_list2 =list(set(list1)-set(list2))
print(d)
```

```
[3, 4]
```

Q4

```
In [35]: import itertools
print(list(itertools.permutations([1,2,3])))

[(1, 2, 3), (1, 3, 2), (2, 1, 3), (2, 3, 1), (3, 1, 2), (3, 2, 1)]
```

Q5 Write a Python program to remove duplicates from a list.

```
In [36]: a = [10,20,30,20,10,50,60,40,80,50,40]
b=set(a)
print(b)
```

```
{40, 10, 80, 50, 20, 60, 30}
```

In [ ]: