

```
In [55]: #question-1
a=[2,4,3,5,7]
b=[4,3]
c=[3,7]
def is_sublist(p,q):
    if (all(x in p for x in q)):
        return "subList is part of List a"
    else:
        return "subList is not part of list a"
print(is_sublist(a,b))
print(is_sublist(a,c))
```

subList is part of List a
subList is part of List a

```
In [57]: #question-2
color1=["Red", "Green", "Orange", "White"]
color2=["Black", "Green", "White", "Pink"]
common_item=[]
for i in color1:
    for j in color2:
        if i==j:
            common_item.append(i)
print(common_item)
```

['Green', 'White']

```
In [48]: #question-3
list1 = [1, 2, 3, 4]
list2 = [1, 2]

difference_list = []
for x in list1:
    if x not in list2:
        difference_list.append(x)
print(difference_list)
```

[3, 4]

```
In [58]: #question-4
import itertools

Input=[1,2,3]

permutations=list(itertools.permutations(Input))
print (permutations)
```

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

```
In [59]: #question-5
a = [10,20,30,20,10,50,60,40,80,50,40]
b=[]
for x in a:
    if x not in b:
        b.append(x)
```

[10, 20, 30, 50, 60, 40, 80]