

1 Question

```
In [13]: def is_Sublist(x,y):
          x1=set(x)
          y1=set(y)
          if y1.difference(x1)==set():
              return "It is a sublist"
          else:
              return "It is not a sublist"
a=[2,4,3,7,5]
b=[3,5]
c=[4,7]
print(is_Sublist(a, b))
print(is_Sublist(a, c))
print(is_Sublist(c, b))
```

```
It is a sublist
It is a sublist
It is not a sublist
```

2nd question

```
In [14]: def is_Similar(m,n):
          m1=set(m)
          n1=set(n)
          return m1.intersection(n1)

color1 = "Red", "Green", "Orange", "White"
color2 = "Black", "Green", "White", "Pink"

print(is_Similar(color1,color2))
```

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

3rd question

```
In [15]: def is_Notsimilar(m,n):
          m2=set(m)
          n2=set(n)
          return m2.symmetric_difference(n2)

list1 = [1, 2, 3, 4]
list2 = [1, 2]

print(is_Notsimilar(list2,list1))
```

```
{3, 4}
```

4th Question

```
In [18]: import itertools
print(list(itertools.permutations([1,2,3])))
# dir(itertools)
```

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

5th Question

```
In [14]: a = [10,20,30,20,10,50,60,40,80,50,40]
s=set(a)
print(s)
```

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