

```
In [ ]: '''1. Write a Python program to check whether a list contains a sublist.
# Input
# a = [2,4,3,5,7]
# b = [4,3]
# c = [3,7]
# print(is_Sublist(a, b))
# print(is_Sublist(a, c))
# Output

2. Write a Python program to find common items from two lists.
# input
# color1 = "Red", "Green", "Orange", "White"
# color2 = "Black", "Green", "White", "Pink"
# output
# {'Green', 'White'}

3. Write a Python program to get the difference between the two lists
# Input
# list1 = [1, 2, 3, 4]
# list2 = [1, 2]
# Output
# [3,4]

4. Write a Python program to generate all permutations of a list in Python
# Input [1,2,3]
# Output [(1, 2, 3), (1, 3, 2), (2, 1, 3), (2, 3, 1), (3, 1, 2), (3, 2, 1)]

5. Write a Python program to remove duplicates from a list.
# Input a = [10,20,30,20,10,50,60,40,80,50,40]
# Output {40, 10, 80, 50, 20, 60, 30}

'''
```

1 Question

```
In [5]: def is_Sublist(x,y):
c=0
for i in range(0,len(y)):
    for j in range(0,len(x)):
        if y[i]==x[j]:
            c+=1
if c==len(y):
    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 [7]: def is_Similar(m,n):
c=[]
for i in range(0,len(n)):
    for j in range(0,len(m)):
        if n[i]==m[j]:
            c.append(m[j])

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

print(is_Similar(color1,color2))

['Green', 'White']
```

3rd question

```
In [ ]: # def is_Notsimilar(m,n):
diff=[]
for i in range(0,len(n)):
    c=0
    for j in range(0,len(m)):
        if n[i]==m[j]:
            c+=1
    if c==0:
        diff.append(n[i])

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

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

4th Question

```
In [1]: 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)]
```

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}
```

In []: