ASSIGNMENT-6

1)
```
Def sublist(list1,  list2):
     if list2 == []:
    return True
      for i in range(len(list1)):
         if list1[i:i + len(list2)] == list2:
             return True
        else
       return False
    a = [2, 4, 3, 5, 7]
    b = [4, 3]
    c = [3, 7]
       print(sublist(a, b))
       print(sublist(a, c))
```

2)
```
def find_common_items(list1, list2):
common_items = [item for item in list1 if item in list2]
   return common_items
color1 = ["Red", "Green", "Orange", "White"]
color2 = ["Black", "Green", "White", "Pink"]
common_colors = finding_common_items(color1, color2)
     print(common_colors)
```

3)
```
def find_list_difference(list1, list2):
   set1 = set(list1)
   set2 = set(list2)
   difference = list(set1 - set2)
   return difference
list1 = [1, 2, 3, 4]
list2 = [1, 2]
result = find_list_difference(list1, list2)
print(result)
```

4)
```
import itertools
intlist  =  [1, 2, 3]
result  =  list(itertools.permutations(intlist))
print(result)
```

5)
```
a = [10, 20, 30, 20, 10, 50, 60, 40, 80, 50, 40]
     unique_list = []

     for item in a:
        if item not in unique_list:
           unique_list.append(item)

     print(unique_list)
```