Answer 1

```
def is_Sublist(mainList, subList):
    res = False
    for i in range(len(mainList) - len(subList) + 1):
        if mainList[i : i + len(subList)] == subList:
            res = True
            break
    return res

a = [2,4,3,5,7]
b = [4,3]
c = [3,7]
print(is_Sublist(a, b))
print(is_Sublist(a, c))
```

```
True
False
```

Answer 2

```
def getCommon(l1, l2):
    s1 = set(l1)
    s2 = set(l2)
    return s1 & s2

color1 = ["Red", "Green", "Orange", "White"]
color2 = ["Black", "Green", "White", "Pink"]
getCommon(color1, color2)
```

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

Answer 3

```
def diff(l1, l2):
    diff1 = [i for i in set(l1) if i not in set(l2)]
    diff2 = [i for i in set(l2) if i not in set(l1)]

    return diff1 + diff2

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

diff(list1, list2)
```

```
[3, 4]
```

Answer 4

```
def permutation(lst):
    if len(lst) == 0:
```

```
        return []

    if len(lst) == 1:
        return [lst]

    l = []

    for i in range(len(lst)):
        m = lst[i]
        remLst = lst[:i] + lst[i+1:]

        for p in permutation(remLst):
            l.append([m] + p)

    return l

inList = [1, 2, 3]
permutation(inList)
```

```
[[1, 2, 3], [1, 3, 2], [2, 1, 3], [2, 3, 1], [3, 1, 2], [3, 2, 1]]
```

Answer 5

```
inList = [10,20,30,20,10,50,60,40,80,50,40]
outList = list(set(inList))
outList
```

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