

**Question 1: Sort the below given list in increasing order but all zeros should be at right hand side .**

**[0,1,2,10,4,1,0,56,2,0,1,3,0,56,0,4]**

```
In [1]: list=[0,1,2,10,4,1,0,56,2,0,1,3,0,56,0,4]
list.sort()
```

```
In [2]: list
```

```
Out[2]: [0, 0, 0, 0, 0, 1, 1, 1, 2, 2, 3, 4, 4, 10, 56, 56]
```

```
In [6]: list1=list
print(list1)
```

```
[0, 0, 0, 0, 0, 1, 1, 1, 2, 2, 3, 4, 4, 10, 56, 56]
```

```
In [11]: def move_zero(list1):
          a = [0 for i in range(list1.count(0))]
          x = [ i for i in list1 if i != 0]
          x.extend(a)
          return(x)

          print(move_zero([0, 0, 0, 0, 0, 1, 1, 1, 2, 2, 3, 4, 4, 10, 56, 56]))
```

```
[1, 1, 1, 2, 2, 3, 4, 4, 10, 56, 56, 0, 0, 0, 0, 0]
```

**Question 2 : Merge given below two sorted list ,produce one sorted list use while loop.**

list1 =[10,20,40,60,70,80] list2 =[5,15,25,35,45,60]

```
In [16]: list1=[10,20,40,60,70,80]
list2 =[5,15,25,35,45,60]

a = len(list1)
b = len(list2)

res = []
c, d = 0, 0

while c < a and d < b:
    if list1[c] < list2[d]:
        res.append(list1[c])
        c += 1
    else:
        res.append(list2[d])
        d += 1

res = res + list1[c:] + list2[d:]

print ("The combined sorted list is : " + str(res))
```

```
The combined sorted list is : [5, 10, 15, 20, 25, 35, 40, 45, 60, 60, 70, 80]
```