**Assignment 1**

In [1]: list1=[0,1,2,10,4,1,0,56,2,0,1,3,0,56,0,4]  
In [2]: list1.sort(reverse=1)  
In [3]: print(list1)

**Output**

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

**Assignment 2**

**Merge two sorted list and produced one sorted list.**

test\_list1 = [10, 20, 40, 60, 70, 80]

test\_list2 = [5, 15, 25, 35, 45, 60]

print ("The original list 1 is : " + str(test\_list1))

print ("The original list 2 is : " + str(test\_list2))

size\_1 = len(test\_list1)

size\_2 = len(test\_list2)

res = []

i, j = 0, 0

while i < size\_1 and j < size\_2:

if test\_list1[i] < test\_list2[j]:

res.append(test\_list1[i])

i += 1

else:

res.append(test\_list2[j])

j += 1

res = res + test\_list1[i:] + test\_list2[j:]

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

**Output**

The original list 1 is : [10, 20, 40, 60, 70, 80]

The original list 2 is : [5, 15, 25, 35, 45, 60]

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