PRACTICAL-8

**WRITING AND UNDERSTANDING PROGRAM IN PYTHON**

THIS IS A PROGRAM TO SORT A GIVEN LIST USING COUNTING SORT TECHNIQUE.

**PYTHON CODE**

print("Enter the list of integers to be sorted")

a=list(map(int, input().split(" ")))

b=[]

c=[]

for i in range(max(a)+1):

    c.append(0)

for i in range(len(a)):

    c[a[i]]+=1

for i in range(1,len(c)):

    c[i]+=c[i-1]

for i in range(len(a)):

    b.append(0)

for i in range(len(a)):

    b[c[a[i]]-1]=a[i]

    c[a[i]]-=1

print("The sorted list is:")

print(b)

**OUTPUT:**

