**Exercise No** : 8

**Date** : 20.11.2020

**Aim**: To write  a Python program to get a list of numbers of list and create a list of tuples having first element as the number and second element as the cube of the number. Next the list of tuples should be sorted in increasing order by the last element in each tuple from a given list of non-empty tuples.

**Program**:

n=int(input())

lst=[]

for i in range(n):

a=int(input())

lst.append(a)

r=[(j,pow(j,3))for j in lst]

print(r)

def first(n):

return n[0]

r.sort(key=first)

print(r)

**Link** : <http://103.53.53.18/mod/vpl/forms/edit.php?id=317&userid=1774#>

**Output**:

input:

3 #number of element in the list

1

3

2

[(1, 1), (3, 27), (2, 8)] #Before sorting

[(1, 1), (2, 8), (3, 27)] #after sorting

**Result** : A list of numbers of list is given and a list of tuples is created , having first element as the number and second element as the cube of the number. Next the list of tuples should be sorted in increasing order by the last element in each tuple from a given list of non-empty tuples is obtained.