**ASSIGNMENT 6**

**Question 1.**

def calcletter(mystr) :

lcnt,ucnt = 0,0

for char in mystr:

if(char.isupper()): ucnt +=1

else : lcnt +=1

print("The no. Of Upper Case letters are : ",ucnt)

print("The no. Of Lower Case letters are : ",lcnt)

mystr = input("Enter a string : ")

calcletter(mystr)

**Question 2.**

inp = input()

inplist,new = inp.split(),[]

for item in inplist:

if(item not in new):

new.append(item)

new.sort()

for item in new:

print(item,":",inplist.count(item))

**Question 3.**

new,inplist = [],input("Enter list elements : ").split(" ")

for item in inplist:

if(item not in new):

new.append(item)

print(new)

**Question 4.**

# print(list(filter(lambda x :True if sum(j if x%j==0 else 0 for j in

range(1, x-1))==x else False, [x for x in range(2, 5000)])))

print([num for num in range(1,5001)

if(sum((i for i in range(1,int(num/2)+1) if(num%i==0)))==num)])

**Question 5.**

def func1(x):

def func2(y):

return x\*y

return func2

num1 = func1(5)

print(num1(3))

**Question 6.**

def func(\*args):

sum = 0

for item in args:

sum +=item

return sum

print(func(10,20,30))

**Question 7.**

inplist = [1,2,3,4,5,6,7,8,9,10]

print(list(map(lambda x:x\*x,inplist)))

**Question 8.**

inplist = [1,2,3,4,5,6,7,8,9,10]

print(list(filter(lambda x:x%2==0,inplist)))

**Question 9.**

inplist = [1,2,3,4,5,6,7,8,9,10]

print(list(map(lambda x: x\*x,filter(lambda x: x%2==0,inplist))))

**Question 10.**

def fibo(n):

if(n==0 or n==1):

return n

else:

return fibo(n-1) + fibo(n-2)

print(fibo(int(input())))