## **Ex. No. : 4.1 Nth Fibonacci**

**Program:**

a=int(input())b=0 c=1 if(a==1): print("0") elif(a==2): print("1") else: for i in range (3,a+1):

d=b+c b=c c=d print(d)

**Ex. No. : 4.2** [**Factors of a number**](https://www.rajalakshmicolleges.net/moodle/mod/quiz/view.php?id=5720)

**Program:**

a=int(input()) for i in range(1,a+1): if(a%i==0):

print(i,end=" ")

**Ex. No. : 4.3 Product of single digit**

**Program:**

a=int(input()) c=0 for i in range(1,10): for j in range(1,10): if i\*j==a: c=1 if(c==1): print("Yes") ▾else:

print("No")

## **Ex. No. : 4.4 Unique Digit Count**

**Program:**

a=input() b=len(set(a)) print(b)

## **Ex. No. : 4.5** [**Non**](https://www.rajalakshmicolleges.net/moodle/mod/quiz/view.php?id=5717) **Repeated Digit Count**

**Progrm:** a={}

for i in input: if i in a:a[i]+=1 else:a[i]=1 print(sum([1 for i in a if a[i]==1]))

## **Ex. No. : 4.6 Next Perfect Square**

**Program:** import math a=int(input()) b = a + 1 while b > 0 :

m=math.sqrt(b) if(m==int(m)):

print(b) break else:

b = b + 1

## **Ex. No. : 4.7 Sum of Series**

**Program:**

a=int(input()) t=1 s=0 for i in range(a) s+=t t=t\*10+1

print(s)

## **Ex. No. : 4.8 Prime Checking**

**Program:**

a=int(input()) c=0 for i in range(2,a):

if(a%i==0):

c=1 if(c==1): print("1") elif(c==0): print("2”)

## **Ex. No. : 4.9 Disarium Number**

**Program:**

a=input() n=len(a) r=0 for i,d in enumerate(a): r+=int(d)\*\*(i+1) if r==int(a): print("Yes")

else:

print("No")

## **Ex. No. : 4.10 Perfect Square After adding One**

**Program:**

import math a=int(input()) b=a+1 c=math.sqrt(b) if(c==int(c)): print("Yes") else:

print(“No”)