**1a).NUMBER SERIES**

**PROGRAM :**

n=int(input("enter n value :"))

fact=1

sum=0

if(n==0) :

fact=1

for i in range(1,n+2) :

fact=fact\*i

sum=sum+((i-1))/fact

print("the sum of the series is :" ,sum)

**OUTPUT :**

enter n value :5

the sum of the series is : 0.998611111111111

**1b).FIBONACCI SERIES**

**PROGRAM :**

a=int(input("enter the first number :"))

b=int(input("enter the second number :"))

n=int(input("enter the n value :"))

print("the fibonaci series :")

print(a)

print(b)

i=0

while(i<n) :

c=a+b

print(c)

a=b

b=c

i=i+1

**OUTPUT :**

enter the first number :1

enter the second number :2

enter the n value :8

the fibonaci series :

1

2

3

5

8

13

21

34

55

89

**2.INVERTED PYRAMID WITH THE SAME DIGIT**

**PROGRAM :**

n=int(input("enter the number of rows to be printed :"))

a=int(input("enter the number to be printed :"))

for i in range(1,n+1) :

print(" ")

for j in range(i,n+1) :

print(a,end=" ")

**OUTPUT :**

enter the number of rows to be printed :5

enter the number to be printed :5

5 5 5 5 5

5 5 5 5

5 5 5

5 5

5

**3.RIGHT DOWN MIRROR STAR PATTERN**

**PROGRAM :**

n=int(input("enter the number of rows to be printed :"))

for i in range(1,n+1) :

for j in range(1,n+1) :

if(j<i) :

print(" ",end=" ")

else :

print("\*",end=" ")

print()

**OUTPUT :**

enter the number of rows to be printed :5

\* \* \* \* \*

\* \* \* \*

\* \* \*

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**4.REVERSING A NUMBER**

**PROGRAM :**

n=int(input("enter the number :"))

num=n

sum=0

while(n>0) :

rem=n%10

sum=(sum\*10)+rem

n=n//10

print("the reverse of the number ",num,"is",sum)

**OUTPUT :**

enter the number :12345

the reverse of the number 12345 is 54321