EX.NO:4-A **SUM OF SERIES**

07/01/23

AIM:

To find the sum of the series by using python program.

ALGORITHM:

Step 1: Start

Step 2: Get value of n

Step 3: Initialse i=0 and sum=0

Step 4:for i in range(0,n+1)

4.1:if(i<=n)

4.2: Sum=Sum+i

4.3: Increment i by 2

Step 5: Print("Sum of the Series")

Step 6: Stop

PROGRAM:

```
n=int(input("Enter the Number : "))
j=0
sum=0
for i in range(0,n+1):
    if(i<=n):
        sum=sum+i
        i+=2
print("Sum of the Series =",sum)
```

OUTPUT:

Enter the Number : 5

Sum of the Series =6

EX.NO:4-C INVERTED PYRAMID PATTERN OF NUMBERS

07/01/23

AIM:

To print the numbers in inverted pyramid pattern using python program.

ALGORITHM:

Step 1: Start

Step 2: Get value of n

Step 3:for i in range(1,n+1)

3.1: Print()

3.2:for j in range(n-I,0,-1)

3.3: Print(i)

Step 4: Stop

PROGRAM:

```
n=int(input("Enter the Value : "))
for i in range(1,n+1):
   for j in range(i,n+1):
      print(i,end="")
   print()
```

OUTPUT:

Enter the Value : 6

11111

2222

333

44

5

EX.NO:4-D DOWNWARD FULL PYRAMID PATTERN OF STAR

07/01/23

AIM:

To print downward full pyramid pattern of star by using python program.

ALGORITHM;

Step 1: Start

Step 2: Get value of n

Step 3: Initialse space=0

Step 4:for i in range(n)

4.1:for j in range(space)

4.2:print(“ “,end=””)

4.3: Increment space value by 1

4.4:for k in range(n-I,0,-1)

4.5:print**(“ * “,**end**=”’)**

4.6: Print(“ “)

Step 5: Stop

PROGRAM:

```
n=int(input("Enter the Value : "))
space=0
for i in range(n):
    for j in range(space):
        print(" ",end="")
    space=space+1
    for k in range(n-i,0,-1):
        print("* ",end="")
    print(" ")
```

OUTPUT:

Enter the Value : 5

```
* * * * *
 * * * *
  * * *
   * *
    *
```

EX.NO:4-E ARMSTRONG NUMBER

07/01/23

AIM:

To find the given number is Armstrong or not by using python program.

ALGORITHM:

Step 1: Start

Step 2: Get value of n

Step 3: Initialse num=n and sum=0

Step 4:for i in range(0,n+1)

4.1:while(n>0)

4.2:calculate rem=n%10

4.3:calculate sum=sum+(rem**3)

4.4:calculate n//10

Step 5:if(sum==num)

5.1:print(“Armstrong Number”)

5.2:else,print(“Not Armstrong Number”)

Step 6: Stop

PROGRAM:

```
n=int(input("Enter the Number : "))
num=n
sum=0
for i in range(0,n+1):
   while(n>0):
      rem=n%10
      sum=sum+(rem**3)
      n=n//10
```

```
if(sum==num):
    print(num,"is Armstrong Number")
else:
    print(num,"is Not Armstrong Number")
```

OUTPUT:

```
Enter the Number : 153
153 is Armstrong Number
```

EX.NO:4-B **SUM OF SERIES**

07/01/23

AIM:

To find the sum of the series by using python program.

ALGORITHM:

Step 1: Start

Step 2: Get value of n

Step 3: Initialse j=1 and sum=0

Step 4:for i in range(0,n+1)

4.1:if(j<=n)

4.2: Sum=Sum+j

4.3: Increment j=(j*10)+1

Step 5: Print("Sum of the Series")

Step 6: Stop

PROGRAM:

```
n=int(input("Enter the Number : "))
sum=0
```

```
j=1
for i in range(1,n+1):
    sum=sum+j
     j=(j*10)+1
prin(sum)
```

OUTPUT:

Enter the Number : 111111

Sum of the Series is 123456