# **PYTHON MODULE 2**

 $1 \bullet Python Program to find the sum of series 1^2+2^2+3^2...+N^2.$ 

#### For example:

Input	Result	
2	The sum of the series =	5

# PROGRAM:

```
a=int(input())
i=0
c=0
sum = 0
for i in range (1,a+1):
    c=i**2
    sum=sum+c
    i=i+1
print("The sum of the series = ",sum)
```



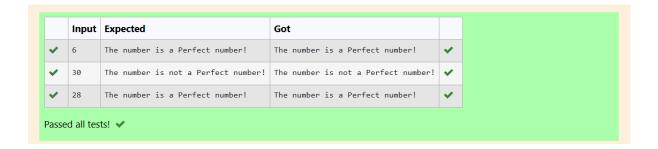
2. Python Program to check if a number is a Perfect number using the concept of functions.

# For example:

Input	Result
6	The number is a Perfect number!

```
PROGRAM:
```

```
a=int(input())
sum=0
for i in range (1,a):
    if(a%i==0):
        sum=sum+i
if sum==a:
    print("The number is a Perfect number!")
else:
    print("The number is not a Perfect number!")
```



**3.** Write a function which takes three arguments: a and b and c and returns the multiplication of them: a\*b\*c. Assign it to a variable named: f. using python

# For example:

Input	Result
10 20 30	6000

# PROGRAM:

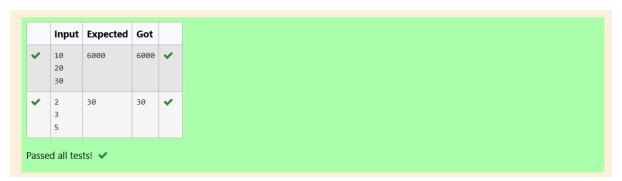
a=int(input())

b=int(input())

c=int(input())

f=lambda a,b,c:a\*b\*c

print(f(a,b,c))



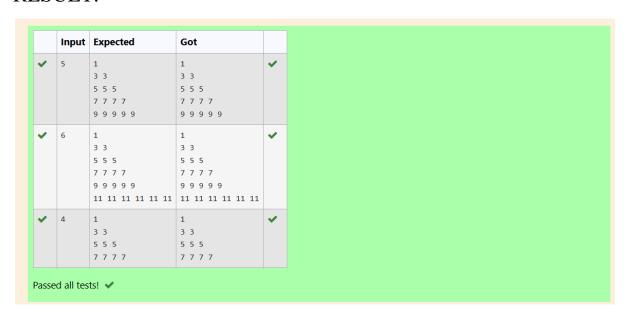
4. Python program to print alternate number pattern .Get the number of rows as input

# For example:

Input	Result				
5	1 3 5 7 9	7	-	7 9	9

# PROGRAM:

```
a=int(input())
for i in range(1,a+1):
  b=2*i-1
  for j in range(1,i+1):
     print(b,end=" ")
  print()
```



5. Write Python program to print reverse Pyramid of numbers. Get the number of rows as input.

# For example:

Input	Result				
6	4	1 2 3 4	2		1

# PROGRAM:

```
a=int(input())
for i in range(1,a):
  for j in range(i,0,-1):
    print(j,end=" ")
  print()
```



