Date:2024-08-20

S.No: 14 Exp. Name: Series Calculation 1

# Aim:

Your friend is a mathematician, and he needs your help in verifying a mathematical series. You have three inputs a, b, and N. Your task is to print the output with the series that results from the following equation  $a + b^1$ ,  $a + b^2$ , ...,  $a + b^N$ 

#### **Input Format:**

- The first line of the input consists of an integer, a.
- The second line of the input consists of an integer b representing the base for the series.
- ullet The third line of the input consists an integer, N representing the number of terms in the series.

#### **Output Format:**

• The output is a single line containing the space-separated terms of the given series.

### **Source Code:**

```
series.py
```

```
a=int(input("a: "))
b=int(input("b: "))
n=int(input("N: "))
print("result: ",end='')
for i in range(1,n+1):
   c=b**i
   res=a+c
   print(f"{res} ",end='')
```

# Execution Results - All test cases have succeeded!

Test Case - 1
User Output
a: 3
b: 2
N: 3
result: 5 7 11

```
Test Case - 2
User Output
a: 4
  3
N: 5
result: 7 13 31 85 247
```