

## ***Basic Number series problems in C***

1) Given an integer N. The task is to write a program to find the Nth term of the given series:

$$2 + 6 + 13 + 23 + \dots$$

Input : N = 5

Output : 36

2) Given an integer N. The task is to write a program to find the N-th term of the given series:

$$1 + 2 + 6 + 15 + 31 + 56 + \dots$$

Input : N = 8

Output : 141

**3) Given an integer N, the task is to find the Nth term of the following series:**

**0, 8, 64, 216, 512, 1000, 1728, . . .**

**Input: N = 6**

**Output: 1000**

**4) Given a series 7, 15, 32, ..... Find the nth term of this series.**

**Input : 5**

**Output : 138**

**5) Given a number N. The task is to write a program to find the Nth term in the below series:**

**Input : 3**

**Output : 54**

**For N = 3**

$$\begin{aligned}\text{Nth term} &= (3*3) * 3! \\ &= 54\end{aligned}$$

[anuj.saxena9127@gmail.com](mailto:anuj.saxena9127@gmail.com)