**Note For All:** Here in some problems it may seems that there is no need to use Recursion to solve that problem. But In this task It is mandatory to use Recursive function to solve all of the problems given below.

**Problem – 1:** In the first line you’ll be given an Integer number N. Then you have to output the summation of all integers between 1 to N.

|  |  |
| --- | --- |
| Sample Input | Output |
| 6 | 21 |

**Problem – 2:** In the first line you’ll be given an integer number N. Then you have to output the value of N! . Here maximum value of N is 20. So you know what type variable you need to use to solve this problem.

|  |  |
| --- | --- |
| Sample Input | Output |
| 5 | 120 |

**Problem – 3:** In the first line you’ll be given an integer number N. Then you have to output the N-th Fibonacci Number. Here maximum value of N is 20.   
Hints: If Fn represent the N-th Fibonacci Number,

Then you can say, Fn = Fn-1 + Fn-2 .

And F0 = 0, F1 = 1

If you face any problem to understand this recurrence relation, then feel free to contact with me on facebook.

|  |  |
| --- | --- |
| Sample Input | Output |
| 7  10 | 13  55 |

**Problem – 4:** Given an Integer number N. You have to output the occurrence of 7 in that number. Here maximum value of N is

|  |  |
| --- | --- |
| Sample Input | Output |
| 45673277 | 3 |

**Problem – 5:** Given three integer number B, P, M. You have to output .

Hints:

And

And

|  |  |
| --- | --- |
| Sample Input | Output |
| 3 6 12  5 3 5 | 9  0 |

**Problem – 6:** Given an Integer number N. You will have to output the sum of all digits of N.

|  |  |
| --- | --- |
| Sample Input | Output |
| 6456 | 21 |

**Problem – 7:** In the first line given an integer N. Then in the next line you’ll given N integers. You will have to find the total occurrence of 13 in this Array.

|  |  |
| --- | --- |
| Sample Input | Output |
| 6  4 6 13 1 90 13 | 2 |

**Problem – 8:** You will be given an integer n. You’ll have to output the value of Sn .   
Here,

And

|  |  |
| --- | --- |
| Sample Input | Output |
| 3 | 10 |