

<https://course.acciojob.com/idle?question=6e19b00c-df61-4125-902c-f479f6b242d2>

● EASY

● Max Score: 30 Points

Sum of natural numbers

Write a recursive program to find out the sum of all natural numbers till N. Take input of N from the user and make a recursive function that returns the sum of all the natural numbers upto N.

Input Format

First line is an integer N

Output Format

Print the sum of first N natural numbers.

Example 1

Input

5

Output

15

Explanation

Here, $n = 5$, so $1 + 2 + 3 + 4 + 5 = 15$

Example 2

Input

1

Output

1

Explanation

Here $n = 1$, so $1 = 1$

Constraints

$1 \leq N \leq 10^3$

Topic Tags

- Recursion
- Basics

My code

// in java

```
import java.util.*;  
import java.lang.*;  
import java.io.*;
```

```
public class Main  
{
```

```
    public static void main (String[] args) throws java.lang.Exception  
    {  
        //your code here
```

```
Scanner s=new Scanner(System.in);
int n=s.nextInt();
int sum=0;
for(int i=0;i<=n;i++)
    sum+=i;
System.out.print(sum);
}
}
```