

<https://course.acciojob.com/idle?question=346dcf47-f0b0-48b9-9e25-c0a004837b34>

● EASY

● Max Score: 30 Points

Product of natural numbers

Write a recursive program to find the product of all the Natural numbers till N . Take input of N from the user and write a recursive function that returns the product of all the Natural numbers until N .

Input Format

Enter an integer N ($N > 0$)

Output Format

Print the product of all the Natural numbers between N and 1 (both included).

Example 1

Input

5

Output

120

Explanation

$5 * 4 * 3 * 2 * 1 = 120$.

Example 2

Input

4

Output

24

Explanation

$4 * 3 * 2 * 1 = 24.$

Constraints

$1 \leq N \leq 14$

Topic Tags

- Recursion

My code

// in java

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

```
public class Main  
{  
    static long prod(int n)  
    {  
        if(n==0)  
            return 1L;  
        else return(n*prod(n-1));  
    }  
}
```

```
}  
public static void main (String[] args) throws java.lang.Exception  
{  
    //your code here  
    Scanner s=new Scanner(System.in);  
    int n=s.nextInt();  
    long p=prod(n);  
    System.out.print(p);  
}  
}
```