

<https://course.acciojob.com/idle?question=f36b8fd8-5f32-4cbb-ba1f-5848f0a35c48>

● EASY

● Max Score: 30 Points

Factorial with loop

You are given a integer n . Your task is to find the factorial of the given integer number n .

Note: Factorial of any given number n is represented as $n! = n * n-1 * n-2 \dots * 1$.

Input Format

The first line consists of a single integer denoting n .

Output Format

Output is a single line containing factorial of n .

Example 1

Input:

5

Output:

120

Explanation:

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

Example 2

Input:

4

Output:

24

Explanation:

$4! = 4 \times 3 \times 2 \times 1 = 24.$

Constraints

$0 \leq n \leq 20$

Topic Tags

- **Loops**

My code

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

public class Main
{
    static long fac(int n)
    {
        long fac=1;
        if (n==0)
```

```

        fac=1L;

        for(int i=1; i<=n; i++)
        {
            fac*=i;
        }
        return fac;
    }

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

        // Scanner s=new Scanner(System.in);
        // int n=s.nextInt();

        // long fac=1;
        // if (n==0)
        //     fac=1;

        //     for(int i=1; i<=n; i++)
        //     {
        //         fac*=i;
        //     }

        //     System.out.print(fac);
    }

```

```

Scanner s=new Scanner(System.in);
    int n=s.nextInt();

```

```
    System.out.print(fac(n));  
    }  
}
```