

# Recursion - Factorial of a Number

Problem

Submissions

Leaderboard

Discussions

Write a program to compute the factorial of a number using recursion.

## Input Format

Input consists of an integer.

## Constraints

NA

## Output Format

The output consists of an integer that corresponds to the factorial value.

## Sample Input 0

5

## Sample Output 0

The factorial of 5 is 120

## Explanation 0

Since the input is 5, its factorial is 120 which will get printed.

## Sample Input 1

10

## Sample Output 1

The factorial of 10 is 3628800

## Explanation 1

Since the input is 10, its factorial is 3628800 which will get printed.

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t

in

Submissions: 514

Max Score: 100

Difficulty: Medium

Rate This Challenge:

☆☆☆☆☆

More

C



```

1 #include <stdio.h>
2 #include <string.h>
3 #include <math.h>

```

```
4 #include <stdlib.h>
5
6 int fact(int n){
7     if(n==0||n==1){
8         return 1;
9     }
10    return n*fact(n-1);
11 }
12
13 int main() {
14
15     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
16     int n;
17     scanf("%d",&n);
18     printf("The factorial of %d is %d",n,fact(n));
19     return 0;
20 }
21
```

Line: 1 Col: 1

 [Upload Code as File](#) ☐ [Test against custom input](#)

[Run Code](#)

[Submit Code](#)

Testcase 0 

Testcase 1 

**Congratulations, you passed the sample test case.**

Click the [Submit Code](#) button to run your code against all the test cases.

Input (stdin)

5

Your Output (stdout)

The factorial of 5 is 120

Expected Output

The factorial of 5 is 120{-truncated-}