

# Factorial

## Description

Given an integer  $n$ . Please output the value of

$$n! = n \times (n - 1) \times \cdots \times 1$$

Moreover, we define that  $0! = 1$ .

You can utilize the given `factorial.cpp` file(s). But be careful, there may be some bugs inside the code.

## Input

Input file will contain only one integer  $n$ .

## Output

Please output the number  $n!$  in a single line.

## Technical Constraints

- For at least 80/100 of test data,  $n$  is guaranteed to satisfy  $0 \leq n \leq 12$ .
- For all test data,  $n$  satisfies  $0 \leq n \leq 20$ .

## Sample Input 1

4

## Sample Output 1

24

## Sample Input 2

6

## Sample Output 2

720