

Extra long factorials



Problem Statement

You are given an integer N . Print the factorial of this number.

$$N! = N \times (N - 1) \times (N - 2) \times \dots \times 3 \times 2 \times 1$$

Note: Factorials of $N > 20$ can't be stored even in a 64 – *bit* long long variable. Big integers must be used for such calculations. Languages like Java, Python, Ruby etc. can handle big integers but we need to write additional code in C/C++ to handle such large values.

We recommend solving this challenge using BigIntegers.

Input Format

Input consists of a single integer N .

Constraints

$$1 \leq N \leq 100$$

Output Format

Output the factorial of N .

Sample Input

25

Sample Output

15511210043330985984000000