
Factorial

Input file: **standard input**
Output file: **standard output**
Time limit: 2 seconds
Memory limit: 64 megabytes

Given a number N . Print the **factorial** of number N .

Input

First line contains a number T ($1 \leq T \leq 15$) number of test cases.

Next T lines will contain a number N ($0 \leq N \leq 20$)

Output

For each test case print a single line contains the **factorial** of N .

Example

standard input	standard output
2	120
5	6
3	

Note

Factorial, in mathematics, the product of all positive integers less than or equal to a given positive integer and denoted by that integer and an exclamation point.

Thus, factorial seven is written $7!$, meaning $1 * 2 * 3 * 4 * 5 * 6 * 7 = 5040$.

Factorial zero is defined as equal to 1.

In first test case for $N = 5$, $5! = 1 * 2 * 3 * 4 * 5 = 120$ so the answer is **120**.

In Second test case for $N = 3$, $3! = 1 * 2 * 3 = 6$ so the answer is **6**.