

G. Small factorials

Time limit: 1s

Memory limit: 1536 MB

You are asked to calculate factorials of some small positive integers.

Input

An integer t , $1 \leq t \leq 100$, denoting the number of testcases, followed by t lines, each containing a single integer n , $1 \leq n \leq 100$.

Output

For each integer n given at input, display a line with the value of $n!$

Example

Sample input:

```
4
1
2
5
3
```

Sample output:

```
1
2
120
6
```