Factorial

Time Limit 1 second

Problem

Alemu just learned how to calculate the factorial of a number using below. But he soon discovered that as the number increased finding the factorial was hard. Your task is to help by writing a recursive program to find the factorial of n.

$$n! = \begin{cases} 1 & if\ n = 0, \\ (n-1)! * n & if\ n > 0 \end{cases}$$

Input

Each test case starts with a line containing t ($2 < t < 50$). Each next line contains integer n ($1 < n < 20$).

Output

For each input record print factorial n.

Sample Input 1	Sample Output 1
3 3 5 9	6 120 362880