Problem 8: Factorials (10 points)

(General) In mathematics, a factorial of a non-negative number n, denoted by n!, is the product of all positive integers less than or equal to n. For example, the value of “3!” is equal to 3*2*1=6. The factorial operation is encountered in many areas of mathematics, notably in algebra and mathematical analysis. Write a program that gives the factorial of integers between 0 to 20 inclusive.

Facts

- The value of 0! is 1.
- Factorials are the multiplicative product of an entire sequence
    - Hence, logic is similar to summing a sequence, but you take the produce instead.

Input

The first line is the number of test cases. Each line thereafter will consist of a integer to be solved as a factorial.

Output

The output must list the solution for the appropriate input value.

Sample Input	**Sample Output**
3 3 2 4	6 2 24