

## 6 Factorial

If  $N$  is an integer number greater than 0, the factorial of  $N$  is defined as  $N \times (N - 1) \times (N - 2) \times (N - 2) \times \dots \times 1$ .

For example, the factorial of 4 is  $4 \times 3 \times 2 \times 1 = 24$ .

Write a program to calculate the factorial of positive integers.

The first line of input to the program will be a number  $1 \leq K \leq 20$ . This will be followed by  $K$  lines. Each of the lines will contain one integer,  $1 \leq N \leq 12$ .

The output of the program will have  $K$  lines, one for each  $N$  in the input. The output will contain the factorial of  $N$ .

Note: The  $\leftarrow$  symbol in the examples below represents a newline character.

### Sample Input

```
3←  
4←  
1←  
12←
```

### Sample Output

```
24←  
1←  
479001600←
```