

## Problem C. Counting Divisors 2

Maybe counting the number of divisors of an integer  $n$  could be too boring for you. Instead, now you have to calculate the number of divisors of  $n! = 1 \times 2 \times \dots \times n$ . As the number of divisors could be too large, you should print the number of divisors modulo  $1,000,000,007 = 10^9 + 7$ .

### Input

Your input consists of an arbitrary number of records, but no more than 50. Each record is a line that consists of only an integer  $n$  ( $1 \leq n \leq 5,000,000$ ). The end of input is indicated by a line containing only the value  $-1$ .

### Output

For each input record, print a line that contains the number of divisors of  $n!$ .

### Example

Standard input	Standard output
3	4
10	270
1000000	141694778
-1	

### Time Limit

1 second.