Problem C. Counting Divisors

Counting divisors of a number is a boring job. For example, if you want to count the number of divisors of 12, you have to consider all integers from 1 to 12 and check whether it divides 12, and then you can obtain the result 6. (1, 2, 3, 4, 6 and 12)

So you are to write a program that calculates the number of divisors of a given positive integer n.

Input

Your input consists of an arbitrary number of records, but no more than 20.

Each record is a line that contains an integer n $(1 \leq n \leq 10^9)$.

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
42 468 2009 -1	8 18 6

Time Limit

1 second.