

Coding Arena

Time Left

00 00 00
hr min secA B C D E **F****Problem : k^{th} largest factor of N**

A positive integer d is said to be a factor of another positive integer N if when N is divided by d , the remainder obtained is zero. For example, for the number 12, there are 6 factors 1, 2, 3, 4, 6, 12. Every positive integer k has at least two factors, 1 and the number k itself.

Given two positive integers N and k , write a program to print the k^{th} largest factor of N .

Input

The input is a comma separated list of positive integer pairs (N , k)

Output

The k^{th} highest factor of N . If N does not have k factors, the output should be 1.

Constraints

$1 < N < 10000000000$. $1 < k < 600$

You can assume that N will have no prime factors which are larger than 13.

Example 1

Input:
12,3

Output:
4

Explanation:

N is 12, k is 3. The factors of 12 are (1,2,3,4,6,12). The highest factor is 12 and the third largest factor is 4. The output must be 4

Example 2

Input:
30,9

Output:
1

Explanation:

N is 30, k is 9. The factors of 30 are (1,2,3,5,6,10,15,30). There are only 8 factors. As k is more than the number of factors, the output is 1.

Rules & Regulations**Launch Code Editor****Notifications****Status messages****Submit Answer**

- ☒ I, confirm that the answer submitted is my own. I would like to
☐ provide attribution to the following sources.

Select Language ▼

Select File

Browse...

Submit

