

# D. Remainders Game

time limit per test: 1 second  
memory limit per test: 256 megabytes  
input: standard input  
output: standard output

Today Pari and Arya are playing a game called Remainders.

Pari chooses two positive integer  $x$  and  $k$ , and tells Arya  $k$  but not  $x$ . Arya have to find the value  $x$ . There are  $n$  ancient numbers  $c_1, c_2, \dots, c_n$  and Pari has to tell Arya if Arya wants. Given  $k$  and the ancient values, tell us if Arya has a winning strategy independent of value of  $x$  or not. Formally, is it true that Arya can understand the value for any positive integer  $x$ ?

Note, that means the remainder of  $x$  after dividing it by  $y$ .

## Input

The first line of the input contains two integers  $n$  and  $k$  ( $1 \leq n, k \leq 1\,000\,000$ ) — the number of ancient integers and value  $k$  that is chosen by Pari.

The second line contains  $n$  integers  $c_1, c_2, \dots, c_n$  ( $1 \leq c_i \leq 1\,000\,000$ ).

## Output

Print "Yes" (without quotes) if Arya has a winning strategy independent of value of  $x$ , or "No" (without quotes) otherwise.

## Examples

|                 |
|-----------------|
| input           |
| 4 5<br>2 3 5 12 |
| output          |
| Yes             |

|            |
|------------|
| input      |
| 2 7<br>2 3 |
| output     |
| No         |

## Note

In the first sample, Arya can understand because 5 is one of the ancient numbers.

In the second sample, Arya can't be sure what is. For example 1 and 7 have the same remainders after dividing by 2 and 3, but they differ in remainders after dividing by 7.