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Newcomers Training ,Do Your Best

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Ahmed_Essam_Yassin | Logout

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PROBLEMS   SUBMIT CODE   MY SUBMISSIONS   STATUS   STANDINGS   CUSTOM INVOCATION

G. Smallest Product

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

Ahmed is assigned a task today. He is given an array A contains of N integers.

His task is to update all elements of the array to some minimum value x, that is, $A_i = x$; $(1 \leq i \leq N)$, such that the product of all elements of this new array is strictly greater than the product of all elements of the initial array.

Note that x should be as minimum as possible such that it meets the given condition.

Help him find the value of x.

Input
The first line consists of an integer N $(1 \leq N \leq 10^5)$, denoting the number of elements in the array.

The next line consists of N space-separated integers A_i $(1 \leq A_i \leq 10^{10})$, denoting the array elements

Output
The only line of output consists of value of x.

Example

input	Copy
5	
4 2 1 10 6	

output	Copy
4	