Problem B. Chef and Subarray

Time limit	1000 ms
Code length Limit	50000 B
OS	Linux

Read problems statements in Mandarin Chinese and Russian.

Chef loves research! Now he is looking for subarray of maximal length with non-zero product.

Chef has an array **A** with **N** elements: $A_1, A_2, \ldots, A_N$.

Subarray A_{ij} of array **A** is elements from index **i** to index **j**: $A_i, A_{i+1}, \ldots, A_j$.

Product of subarray A_{ij} is product of all its elements (from i_{th} to j_{th}).

Input

- First line contains sinlge integer **N** denoting the number of elements.
- Second line contains **N** space-separated integers $A_1, A_2, \ldots, A_N$ denoting the elements of array.

Output

- In a single line print single integer - the maximal length of subarray with non-zero product.

Constraints

- $1 \le N \le 100000$
- $0 \le A_i \le 10000$

Sample 1

Input	Output
6 1 0 2 3 0 4	2

For the first sample subarray is: {2, 3}.

Sample 2

Input	Output
1 0	0

For the second sample there are no subbarays with non-zero product.

Sample 3

Input	Output
3 1 0 1	1

For the third sample subbarays is {1}, (the first element, or the third one).