

Problem A. Playlist

Time limit 1000 ms

Mem limit 524288 kB

You are given a playlist of a radio station since its establishment. The playlist has a total of n songs.

What is the longest sequence of successive songs where each song is unique?

Input

The first input line contains an integer n : the number of songs.

The next line has n integers k_1, k_2, \dots, k_n : the id number of each song.

Output

Print the length of the longest sequence of unique songs.

Constraints

- $1 \leq n \leq 2 \cdot 10^5$
- $1 \leq k_i \leq 10^9$

Sample

Input	Output
8 1 2 1 3 2 7 4 2	5