Problem M
Solitaire

Time limit: **2 seconds**
Mem limit: **256 Megabytes**

Mr. Bikrone invented the following solitaire:

Let n cards be laid out in a row, each of which contains one number $a_1, a_2, \ldots, a_n$.

Mr. Bikrone looks through these cards from left to right and puts some of them to the right end. The condition for moving a card is the presence to the right of it at least one card with a larger value than its own. More strictly: the card at position i with the value a_i will be moved to the right if there is a position j ($j > i$) such that $a_j > a_i$.

Solitaire is completed when Mr. Bikrone cannot move any card to the right end.

You need to help Mr. Bikrone figure out how many transfers will have to be done to complete the solitaire.

Input

The first line contains one integer n ($1 \leq n \leq 10^6$) – the number of cards in the solitaire.

The second line contains n space-separated integers a_i - a description of the original location cards on the table from left to right ($1 \leq a_i \leq 10^9$).

Output

Print one number - the number of transfers need to be done to finish the solitaire.

Sample input	Sample output
10 3 7 6 8 5 8 2 1 7 6	14

Explanation

- Originally, the cards having values `3,7,6,5,2,1` are first moved to the right end, which take Mr. Bikrone **6 transfers**. After that, the new setup is `8,8,7,6,3,7,6,5,2,1.`
- Next, the cards having values `6,3` are moved to the right end, which leads to the sequence `8,8,7,7,6,5,2,1,6,3`. Mr. Bikrone needs to transfer **2 times.**
- The cards valued `5,2,1` are then transferred to the right end with **3 transfers** and leads to the sequence `8,8,7,7,6,6,3,5,2,1`.
- After that, only one card of value `3` is transferred to the right end, which takes **1 transfer** and the sequence is now `8,8,7,7,6,6,5,2,1,3`.
- Finally, the two cards `2,1` are transferred to the right end and Mr. Bikrone has the final version of the card sequence `8,8,7,7,6,6,5,3,2,1`, with the **2 last transfers**.

The total number of transfers are $6 + 2 + 3 + 1 + 2 = $ **14 transfers**.