Mission Impossible

Tom is shooting for his film Mission Impossible. Again he wants to perform a daring stunt for this film. There are N buildings that are adjacent to each other. The height of the **i^{th}** building is **A_i**. He wants to jump from the top of one building to another. To make this nearly impossible, he jumps from building **i** to building **j** only if **$A_j > A_i$ and j > i**. He wants to land on as many buildings as possible.

Find the maximum number of buildings he can land on by satisfying the constraint.

Note: He can start at the top of any building.

Input

N Number of buildings

Next Line contains N integers A_1, A_2, …. A_n

Where A_i is the height of the **i^{th}** building.

Constraints

1 <= N <= 100000

1 <= A_i <= 1000000000

Output

Find the maximum number of buildings he can land on by satisfying the constraint in the question.

Sample Input

5

2 1 1 2 1

Output

2

Explanation

He can start at building 2 and jump to building 4. Therefore he lands on 2 buildings.