Problem K
Tower of Hoabinh
Time limit: 1 second

The Grand Developer Solution Contest (GDSC) is an annual competition held at GDG on Campus - PTIT. In addition to contests covering Solution Challenge problems, the organizers also include a logic math competition for participants. We are already familiar with the "Tower of Hanoi" problem, or the "Tower of noiHa" problem featured in the 48-th ICPC World Finals. Based on these problems, the organizers have proposed the following challenge.

Each participant will be provided with a certain number of blocks by the organizers and will be tasked with stacking them into towers while satisfying the following conditions:

- Each participant will receive their first block and create their first tower.
- Upon receiving a block, the participant must immediately place it in an existing tower or create a new tower before receiving the next block from the organizers.
- The towers must satisfy the condition that the volume of any block placed above must not exceed the volume of the block directly below it.
- Blocks cannot be transferred from one tower to another.
- Each participant must aim to construct as few towers as possible.

As a participant in the competition, calculate how many *minimum* towers are constructed that satisfy the conditions set by the organizers.

Input

The first line contains a positive integer N — the number of blocks provided by the organizers.

The next line contains N non-negative integers v, where v_i is the volume of the i-th block.

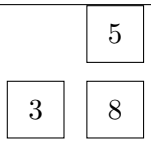
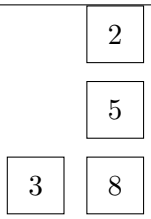
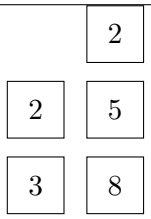
Output

A single line containing the minimum number of towers created.

Constraints

$1 \leq N \leq 3 \times 10^5$.
$1 \leq v_i \leq 10^9$.

Sample Explanation

Blocks	Tower formed by the blocks
First block: 3	
Second block: 8	
Third block: 5	
Fourth block: 2	
Fifth block: 2	

So we have 2 towers formed. Answer is 2.

Sample Input 1	Sample Output 1
5 3 8 5 2 2	2