

Q7 (20 Marks) n trees are lined up in a straight line. T_1 is the first tree. Tree T_i is next to T_{i-1} , $2 \leq i \leq n$. You stand on a floor of the building in front of T_1 . For you to be able to see tree T_j , every tree in front of T_j must be shorter than T_j . You have an axe to cut tree down (but you cannot trim its height).

Give the list of tree heights, and suppose that you can cut any number of trees down, find the maximum number of trees that you can see altogether.

INPUT

A sequence of n integers, $n \leq 2000$, which are the heights of the trees, in the same order as the tree indices.

OUTPUT

The maximum number of trees that you can see altogether

EXAMPLE

INPUT	OUTPUT
6 5 6 3 4 4 5	3
5 4 1 4 1 1	2