The longest ascending subsequence

Cost: 10 | Solved: 20

Memory limit: 256 MBs

Time limit: 1 s

Input: input.txt

Output: output.txt

Task:

You are given a sequence of ***n*** numbers. Find its longest ascending subsequence (which means that every next element of the subsequence is greater than a previous element). Elements are not strictly supposed to be adjacent.

Input:

The first line contains a natural ***n*** – the quantity of elements, then ***n*** elements on the next line.

Output:

The length of the longest ascending subsequence**.** If such subsequence doesn't exist, write -1.

Example:

Input	Output
9 2 6 3 4 1 2 9 5 8	5
5 5 4 3 2 1	-1

(The longest ascending subsequence in the first example is 2 3 4 5 8)