ASTU-ICPC

Monotonous Monotones

Description

Given a sequence of numbers, a monotonically increasing subsequence is a subsequence in which the numbers are strictly increasing. In this sequence:

Both of these subsequences are monotonically increasing:

1 2 4 7 11 14 and 1 2 3 8 14

The Problem:

Given a sequence, find the length of the longest monotonically increasing subsequence.

The Input:

Several lines, each with a sequence of integers. There will be no more than ten integers in each sequence.

The Output:

Print the message: 'n' the longest monotonically increasing subsequence.

Then, print a blank line.

Sample Input:

3

1 2 9 4 7 3 11 8 14 6

1 2 3 4 5

5 4 3 2 1

Sample Output:

6

5

1