

Check if an array is sorted

Given an array, write a program that prints 1 if array is sorted in non-decreasing order, else prints 0.

Input:

The first line of input contains an integer T denoting the number of test cases.

The first line of each test case is N, N is the size of array.

The second line of each test case contains N input C[i].

Output:

Print 1 if array is sorted, else print 0.

Constraints:

$$1 \leq T \leq 100$$

$$1 \leq N \leq 500$$

$$1 \leq C[i] \leq 1200$$

Example:

Input

2

5

10 20 30 40 50

6

90 80 100 70 40 30

Output

1

0