

## A. I\_love\_%username%

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

Vasya adores sport programming. He can't write programs but he loves to watch the contests' progress. Vasya even has a favorite coder and Vasya pays special attention to him.

One day Vasya decided to collect the results of all contests where his favorite coder participated and track the progress of his coolness. For each contest where this coder participated, he wrote out a single non-negative number — the number of points his favorite coder earned in the contest. Vasya wrote out the points for the contest in the order, in which the contests run (naturally, no two contests ran simultaneously).

Vasya considers a coder's performance in a contest *amazing* in two situations: he can break either his best or his worst performance record. First, it is amazing if during the contest the coder earns strictly **more** points that he earned on each past contest. Second, it is amazing if during the contest the coder earns strictly **less** points that he earned on each past contest. A coder's first contest isn't considered amazing. Now he wants to count the number of amazing performances the coder had throughout his whole history of participating in contests. But the list of earned points turned out long and Vasya can't code... That's why he asks you to help him.

### Input

The first line contains the single integer  $n$  ( $1 \leq n \leq 1000$ ) — the number of contests where the coder participated.

The next line contains  $n$  space-separated non-negative integer numbers — they are the points which the coder has earned. The points are given in the chronological order. All points do not exceed 10000.

### Output

Print the single number — the number of amazing performances the coder has had during his whole history of participating in the contests.

### Examples

<b>input</b>
5 100 50 200 150 200
<b>output</b>
2
<b>input</b>
10 4664 6496 5814 7010 5762 5736 6944 4850 3698 7242
<b>output</b>
4

### Note

In the first sample the performances number 2 and 3 are amazing.

In the second sample the performances number 2, 4, 9 and 10 are amazing.

### → Attention

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

### Codeforces Round #109 (Div. 2)

Finished

### → Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.


Start virtual contest

### → Problem tags

brute force

No tag edit access

### → Contest materials

- Announcement 
- Tutorial 