

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 than he earned on each past contest. Second, it is amazing if during the contest the coder earns strictly **less** points than 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

input	Copy
5 100 50 200 150 200	
output	Copy
2	

input	Copy
10 4664 6496 5814 7010 5762 5736 6944 4850 3698 7242	
output	Copy
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](#)
[Practice](#)


→ 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 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](#)

→ Clone Contest to Mashup

You can clone this contest to a mashup.

[Clone Contest](#)

→ Submit?

 Language: Java 1.8.0_241

 Choose file: [Choose file](#) No file chosen

Be careful: there is 50 points penalty for submission which fails the pretests or resubmission (except failure on the first test, denial of judgement or similar verdicts). "Passed pretests" submission verdict doesn't guarantee that the solution is absolutely correct and it will pass system tests.

[Submit](#)



[→ Problem tags](#)

brute force

*800

No tag edit access

[→ Contest materials](#)

- Announcement 
- Tutorial 

[Codeforces](#) (c) Copyright 2010-2021 Mike Mirzayanov
The only programming contests Web 2.0 platform
Server time: Aug/23/2021 16:51:42^{UTC+2} (g1).
Desktop version, switch to [mobile version](#).
[Privacy Policy](#)

Supported by



ITMO UNIVERSITY