

[HOME](#) [CONTESTS](#) [GYM](#) [PROBLEMSET](#) [GROUPS](#) [RATING](#) [API](#) [VK CUP](#)  [SECTIONS](#)
[PROBLEMS](#) [SUBMIT CODE](#) [MY SUBMISSIONS](#) [STATUS](#) [HACKS](#) [ROOM](#) [STANDINGS](#) [CUSTOM INVOCATION](#)

D. Pashmak and Parmida's problem

time limit per test: 3 seconds
 memory limit per test: 256 megabytes
 input: standard input
 output: standard output

Parmida is a clever girl and she wants to participate in Olympiads this year. Of course she wants her partner to be clever too (although he's not)! Parmida has prepared the following test problem for Pashmak.

There is a sequence a that consists of n integers a_1, a_2, \dots, a_n . Let's denote $f(l, r, x)$ the number of indices k such that: $l \leq k \leq r$ and $a_k = x$. His task is to calculate the number of pairs of indices i, j ($1 \leq i < j \leq n$) such that $f(1, i, a_i) > f(j, n, a_j)$.

Help Pashmak with the test.

Input

The first line of the input contains an integer n ($1 \leq n \leq 10^6$). The second line contains n space-separated integers a_1, a_2, \dots, a_n ($1 \leq a_i \leq 10^9$).

Output

Print a single integer — the answer to the problem.

Examples

input
7 1 2 1 1 2 2 1
output
8

input
3 1 1 1
output
1

input
5 1 2 3 4 5
output
0

Codeforces Round #261 (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 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](#)

→ Practice

You are registered for practice. You can solve problems unofficially. Results can be found in the contest status and in the bottom of standings.

→ Submit?

Language: GNU G++ 5.1.0 ▼

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](#)

→ Last submissions

Submission	Time	Verdict
20037375	Aug/22/2016 05:12	Accepted
20036290	Aug/22/2016 02:57	Wrong answer on test 10
16285333	Feb/23/2016 04:03	Time limit exceeded on test 6

→ Problem tags

[data structures](#)[divide and conquer](#)[sortings](#)

No tag edit access

[→ Contest materials](#)

- [Announcement](#)



- [Tutorial](#)



[Codeforces](#) (c) Copyright 2010-2016 Mike Mirzayanov
The only programming contests Web 2.0 platform
Server time: Aug/22/2016 08:51:44^{UTC+6} (c2).
Desktop version, switch to [mobile version](#).