



HOME CONTESTS GYM PROBLEMSET GROUPS RATING API CANADA CUP 🖫 SECTIONS

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

# B. Fixed Points

time limit per test: 2 seconds memory limit per test: 256 megabytes input: standard input output: standard output

A permutation of length n is an integer sequence such that each integer from 0 to (n-1) appears exactly once in it. For example, sequence [0, 2, 1] is a permutation of length 3 while both [0, 2, 2] and [1, 2, 3] are not.

A fixed point of a function is a point that is mapped to itself by the function. A permutation can be regarded as a bijective function. We'll get a definition of a fixed point in a permutation. An integer i is a fixed point of permutation  $a_0, a_1, ..., a_{n-1}$  if and only if  $a_i = i$ . For example, permutation [0, 2, 1] has 1 fixed point and permutation [0, 1, 2] has 3 fixed points.

You are given permutation *a*. You are allowed to swap two elements of the permutation at most once. Your task is to maximize the number of fixed points in the resulting permutation. Note that you are allowed to make at most one swap operation.

### Input

The first line contains a single integer n ( $1 \le n \le 10^5$ ). The second line contains n integers  $a_0, a_1, ..., a_{n-1}$ —the given permutation.

### **Output**

Print a single integer — the maximum possible number of fixed points in the permutation after at most one swap operation.

# Examples

input	
5 01342	
output	
3	

### → **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 #201 (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 (implementation) (math) No tag edit access

# → Contest materials

- Announcement
- Tutorial