



HOME TOP CONTESTS GYM PROBLEMSET GROUPS RATING EDU API CALENDAR HELP

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

# A. Magnets

time limit per test: 1 second memory limit per test: 256 megabytes input: standard input output: standard output

Mad scientist Mike entertains himself by arranging rows of dominoes. He doesn't need dominoes, though: he uses rectangular magnets instead. Each magnet has two poles, positive (a "plus") and negative (a "minus"). If two magnets are put together at a close distance, then the like poles will repel each other and the opposite poles will attract each other.

Mike starts by laying one magnet horizontally on the table. During each following step Mike adds one more magnet horizontally to the right end of the row. Depending on how Mike puts the magnet on the table, it is either attracted to the previous one (forming a group of multiple magnets linked together) or repelled by it (then Mike lays this magnet at some distance to the right from the previous one). We assume that a sole magnet not linked to others forms a group of its own.







Mike arranged multiple magnets in a row. Determine the number of groups that the magnets formed.

#### Input

The first line of the input contains an integer n ( $1 \le n \le 100000$ ) — the number of magnets. Then n lines follow. The i-th line ( $1 \le i \le n$ ) contains either characters "01", if Mike put the i-th magnet in the "plus-minus" position, or characters "10", if Mike put the magnet in the "minus-plus" position.

### **Output**

On the single line of the output print the number of groups of magnets.

## **Examples**

input	Сору
6	
10	
10	
10	
01	
10 10	
16	
output	Сору
3	
input	Сору
4	
01	
01	
10	
10	
output	Сору
2	

#### Note

#### → 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 #200 (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

<sub> </sub> → Submi	t?
Language:	Java 1.8.0_241 <b>▼</b>
Choose file:	Choose File No file chosen
submiss resubmissio denial of	there is 50 points penalty for ion which fails the pretests or n (except failure on the first test, judgement or similar verdicts).

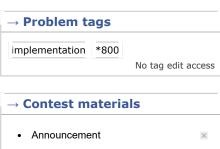
Submit

guarantee that the solution is absolutely correct and it will pass system tests.

The first testcase corresponds to the figure. The testcase has three groups consisting of three, one and two magnets.

The second testcase has two groups, each consisting of two magnets.

→ Last submissions		
Submission	Time	Verdict
132653335	Oct/22/2021 00:25	Accepted



Tutorial

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