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	Copy
6 10 10 10 01 10 10	

output	Copy
3	

input	Copy
4 01 01 10 10	

output	Copy
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

→ **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

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

→ Problem tags

implementation *800

No tag edit access

→ Contest materials

- Announcement
- Tutorial