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
6 10 10 10 01 10 10

output
3

input
4 01 01 10 10

output
2

Note

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.

→ 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

→ Virtual participation

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Start virtual contest

→ Problem tags

implementation

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→ Contest materials

- Announcement
- Tutorial

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