COCI '12 Contest 4 #2 Esej

Time limit: 1.0s **Memory limit:** 32M

Mirko's latest homework assignment is writing an essay. However, he finds writing essays so boring that, after working for two hours, he realized that all he has written are N long words consisting entirely of letters `A` and `B`. Having accepted that he will never finish the essay in time, poor Mirko has decided to at least have some fun with it by counting **nice** words.

Mirko is connecting pairs of **identical** letters (`A` with `A`, `B` with `B`) by drawing arches **above** the word. A given word is nice if each letter can be connected to exactly one other letter in such a way that no two arches intersect. Help Mirko count how many words are nice.

Input Specification

The first line of input contains the positive integer N $(1 \leq N \leq 100)$, the number of words written down by Mirko.

Each of the following N lines contains a single word consisting of letters `A` and `B`, with length between 2 and $100\,000$, inclusive. The sum of lengths of all words doesn't exceed $1\,000\,000$.

Output Specification

The first and only line of output must contain the number of nice words.

Sample Input 1

```
3
ABAB
AABB
ABBA
```

Sample Output 1

```
2
```

Sample Input 2

```
3
AAA
AA
AB
```

Sample Output 2

```
1
```

Sample Input 3

```
1
ABBABB
```

Sample Output 3

```
1
```