B. Anatoly and Cockroaches

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

Anatoly lives in the university dorm as many other students do. As you know, cockroaches are also living there together with students. Cockroaches might be of two colors: black and red. There are n cockroaches living in Anatoly's room.

Anatoly just made all his cockroaches to form a single line. As he is a perfectionist, he would like the colors of cockroaches in the line to **alternate**. He has a can of black paint and a can of red paint. In one turn he can either swap any two cockroaches, or take any single cockroach and change it's color.

Help Anatoly find out the minimum number of turns he needs to make the colors of cockroaches in the line alternate.

Input

The first line of the input contains a single integer n ($1 \le n \le 100\,000$) — the number of cockroaches.

The second line contains a string of length n, consisting of characters 'b' and 'r' that denote black cockroach and red cockroach respectively.

Output

Print one integer — the minimum number of moves Anatoly has to perform in order to make the colors of cockroaches in the line to alternate.

Examples

input
5 rbbrr
output
1

input
5 bbbbb
output
2

input
3 rbr
output
0

Note

In the first sample, Anatoly has to swap third and fourth cockroaches. He needs 1 turn to do this.

In the second sample, the optimum answer is to paint the second and the fourth cockroaches red. This requires 2 turns.

In the third sample, the colors of cockroaches in the line are alternating already, thus the answer is 0.

Codeforces Round #373 (Div. 2)

Finished

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Start virtual contest

→ **Problem tags**

greedy

No tag edit access

→ **Contest materials**

- Announcement ✕
- Tutorial ✕