

String

Description

You are given a string s of length n consisting of lowercase letters. In one operation you can delete some contiguous substring of this string, if all letters in the substring you delete are equal.

Calculate the minimum number of operations to delete the whole string s .

Input Format

The first line contains one integer n .

The second line contains the string s .

Output Format

One integer, the minimum number of operations.

Sample

Sample Input

```
5
abacc
```

Sample Output

```
3
```

Hint

For 100% testcases, $1 \leq n \leq 500$.