
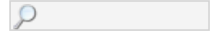


[HOME](#) [TOP](#) [CONTESTS](#) [GYM](#) [PROBLEMSET](#) [GROUPS](#) [RATING](#) [API](#) [HELP](#) [HONORCUP](#)  [CALENDAR](#)

[PROBLEMS](#) [SUBMIT CODE](#) [MY SUBMISSIONS](#) [STATUS](#) [HACKS](#) [STANDINGS](#) [CUSTOM INVOCATION](#)

D. AB-string

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

The string $t_1 t_2 \dots t_k$ is good if each letter of this string belongs to at least one palindrome of length **greater** than 1.

A palindrome is a string that reads the same backward as forward. For example, the strings A, BAB, ABBA, BAABBAAAB are palindromes, but the strings AB, ABBBAA, BBBA are not.

Here are some examples of good strings:

- $t = AABBB$ (letters t_1, t_2 belong to palindrome $t_1 \dots t_2$ and letters t_3, t_4, t_5 belong to palindrome $t_3 \dots t_5$);
- $t = ABAA$ (letters t_1, t_2, t_3 belong to palindrome $t_1 \dots t_3$ and letter t_4 belongs to palindrome $t_3 \dots t_4$);
- $t = AAAAA$ (all letters belong to palindrome $t_1 \dots t_5$);

You are given a string s of length n , consisting of **only** letters A and B.

You have to calculate the number of good substrings of string s .

Input

The first line contains one integer n ($1 \leq n \leq 3 \cdot 10^5$) — the length of the string s .

The second line contains the string s , consisting of letters A and B.

Output

Print one integer — the number of good substrings of string s .

Examples

input	Copy
5 AABBB	
output	Copy
6	

input	Copy
3 AAA	
output	Copy
3	

input	Copy
7 AAABABB	
output	Copy
15	

Note

In the first test case there are six good substrings: $s_1 \dots s_2$, $s_1 \dots s_4$, $s_1 \dots s_5$, $s_3 \dots s_4$, $s_3 \dots s_5$ and $s_4 \dots s_5$.

In the second test case there are three good substrings: $s_1 \dots s_2$, $s_1 \dots s_3$ and $s_2 \dots s_3$.

Educational Codeforces Round 74 (Rated for 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](#)

→ Practice

You are registered for practice. You can solve problems unofficially. Results can be found in the contest status and in the bottom of standings.

→ Clone Contest to Mashup

You can clone this contest to a mashup.

[Clone Contest](#)

→ Submit?

Language: GNU G++11 5.1.0



Choose file: [选择文件](#) [未选择任何文件](#)
[Submit](#)

→ Problem tags

[combinatorics](#) [dp](#) [strings](#)

No tag edit access

→ Contest materials

- Announcement #1 (en) 
- Announcement #2 (ru) 



[Codeforces](#) (c) Copyright 2010-2019 Mike Mirzayanov
The only programming contests Web 2.0 platform
Server time: Oct/09/2019 08:41:03^{UTC+8} (h2).
Desktop version, switch to [mobile version](#).
[Privacy Policy](#)

Supported by



ITMO UNIVERSITY