

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

D. Palindrome Degree

time limit per test: 1 second
memory limit per test: 256 megabytes

String s of length n is called k -palindrome, if it is a palindrome itself, and its prefix and suffix of length $\lfloor n/2 \rfloor$ are $(k - 1)$ -palindromes. By definition, any string (even empty) is 0-palindrome.

Let's call the palindrome degree of string s such a maximum number k , for which s is k -palindrome. For example, "abaaba" has degree equals to 3.

You are given a string. Your task is to find the sum of the palindrome degrees of all its prefixes.

Input

The first line of the input data contains a non-empty string, consisting of Latin letters and digits. The length of the string does not exceed $5 \cdot 10^6$. The string is case-sensitive.

Output

Output the only number — the sum of the polindrome degrees of all the string's prefixes.

Examples

input	Copy
a2A	
output	Copy
1	

input	Copy
abacaba	
output	Copy
6	

→ Attention

The 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, a solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then the value 800 ms will be displayed and used to determine the verdict.

Codeforces Beta Round 7

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

→ Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest

→ Submit?

Language: GNU G++20 13.2 (64 bit, win

Choose file: Choose File No file chosen

Submit

→ Last submissions

Submission	Time	Verdict
281282248	Sep/15/2024 00:29	Accepted
281281817	Sep/15/2024 00:21	Wrong answer on test 8
281281776	Sep/15/2024 00:21	Wrong answer on test 2
281281560	Sep/15/2024 00:16	Wrong answer on test 8
281253362	Sep/14/2024 19:57	Wrong answer on test 8
281252433	Sep/14/2024 19:42	Accepted
281252410	Sep/14/2024 19:42	Accepted
281252063	Sep/14/2024 19:37	Accepted
281251690	Sep/14/2024 19:34	Memory limit exceeded on test 12