

Problem K. Palindromic refrain

Input file: *standard input*
Output file: *standard output*
Time limit: 2 seconds
Memory limit: 512 mebibytes

You are given a string of letters ‘a’ and ‘b’. Let us define substring’s “occurrence value” as the number of the substring occurrences in the string multiplied by the length of the substring. For a given string find the largest occurrence value of palindromic substrings.

Input

The only line of input contains a non-empty string of length n ($1 \leq n \leq 5\,000\,000$).

Output

Output one integer — the largest occurrence value of palindromic substrings.

Example

standard input	standard output
aaa	4