

Palindrome

Let us consider the latin alphabet made of 26 characters (letters from 'a' to 'z').
We call word an ordered sequence of characters of arbitrary length.
Given a word w, we call extracted word v from w a word obtained by deleting some characters in w.
For example, "abcd" is an extracted word from "sbanrpsobtspcerudoo".
A palindrome is a word that is symmetric: it can be read indifferently from left to right or right to left. For example, "abccdccba" is a palindrome.

Task

Our goal is to find the length of one of the longest extracted palindrome from a given word w. Of course if w is a palindrome then the answer should be the length of w, and the answer is always greater or equal than 1.

Input

The input given your program is a one line string containing only lowercase latin alphabet letters (no space), followed by a newline character. The length of this input string will never exceed 2000 characters.

Output

The output your program should write is the length of one of the longest extracted palindrome from the input, **followed by a newline character** .

Sample Input 1

lukeiamyourfather

Sample Output 1

5

Sample Input 2

anynontrivialpropertyofrecursivelyenumerablelanguagesisundecidable

