

Problem D. Antipalindrome

Time limit 1000 ms
Mem limit 262144 kB

A string is a palindrome if it reads the same from the left to the right and from the right to the left. For example, the strings "kek", "abacaba", "r" and "papicipap" are palindromes, while the strings "abb" and "iq" are not.

A substring $s[l \dots r]$ ($1 \leq l \leq r \leq |s|$) of a string $s = s_1s_2 \dots s_{|s|}$ is the string $s_ls_{l+1} \dots s_r$.

Anna does not like palindromes, so she makes her friends call her Ann. She also changes all the words she reads in a similar way. Namely, each word s is changed into its longest substring that is not a palindrome. If all the substrings of s are palindromes, she skips the word at all.

Some time ago Ann read the word s . What is the word she changed it into?

Input

The first line contains a non-empty string s with length at most 50 characters, containing lowercase English letters only.

Output

If there is such a substring in s that is not a palindrome, print the maximum length of such a substring. Otherwise print 0.

Note that there can be multiple longest substrings that are not palindromes, but their length is unique.

Sample 1

Input	Output
mew	3

Sample 2

Input	Output
wuffuw	5

Sample 3

Input	Output
qqqqqqqq	0

Note

"mew" is not a palindrome, so the longest substring of it that is not a palindrome, is the string "mew" itself. Thus, the answer for the first example is 3.

The string "uffuw" is one of the longest non-palindrome substrings (of length 5) of the string "wuffuw", so the answer for the second example is 5.

All substrings of the string "qqqqqqqq" consist of equal characters so they are palindromes. This way, there are no non-palindrome substrings. Thus, the answer for the third example is 0.