

# Problem B

## Peragrams

Problem ID: peragrams

Per recently learned about *palindromes*. Now he wants to tell us about it and also has more awesome scientific news to share with us.

“A palindrome is a word that is the same no matter whether you read it backward or forward”, Per recently said in an interview. He continued: “For example, *add* is not a palindrome, because reading it backwards gives *dda* and it’s actually not the same thing, you see. However, if we reorder the letters of the word, we can actually get a palindrome. Hence, we say that *add* is a *Peragram*, because it is an anagram of a palindrome”.

S	A	T	O	R
A	R	E	P	O
T	E	N	E	T
O	P	E	R	A
R	O	T	A	S

Photo by Ross Beresford

Per gives us a more formal definition of *Peragrams*: “Like I said, if a word is an anagram of at least one palindrome, we call it a *Peragram*. And recall that an anagram of a word  $w$  contains exactly the same letters as  $w$ , possibly in a different order.”

### Task

Given a string, find the minimum number of letters you have to remove from it, so that the string becomes a Peragram.

### Input

Input consists of a string on a single line. The string will contain at least 1 and at most 1 000 characters. The string will only contain lowercase letters a–z.

### Output

Output should consist of a single integer on a single line, the minimum number of characters that have to be removed from the string to make it a Peragram.

#### Sample Input 1

abc

#### Sample Output 1

2

#### Sample Input 2

aab

#### Sample Output 2

0