

# The Love-Letter Mystery

## Problem Statement

James found a love letter his friend Harry has written for his girlfriend. James is a prankster, so he decides to meddle with the letter. He changes all the words in the letter into **palindromes**.

To do this, he follows 2 rules:

- (a) He can reduce the value of a letter, e.g. he can change 'd' to 'c', but he cannot change 'c' to 'd'.
- (b) In order to form a palindrome, if he has to repeatedly reduce the value of a letter, he can do it until the letter becomes 'a'. Once a letter has been changed to 'a', it can no longer be changed.

Each reduction in the value of any letter is counted as a single operation. Find the minimum number of operations required to convert a given string into a palindrome.

## Input Format

The first line contains an integer  $T$ , i.e., the number of test cases.

The next  $T$  lines will contain a string each. The strings do not contain any spaces.

## Output Format

A single line containing the number of minimum operations corresponding to each test case.

## Constraints

$$1 \leq T \leq 10$$

$$1 \leq \text{length of string} \leq 10^4$$

All characters are lower case English letters.

## Sample Input #00

```
4
abc
abcba
abcd
cba
```

## Sample Output #00

```
2
0
4
2
```

## Explanation

1. For the first test case, *abc* -> *abb* -> *aba*.
2. For the second test case, *abcba* is already palindromic string.
3. For the third test case, *abcd* -> *abcc* -> *abcb* -> *abca* = *abca* -> *abba*.
4. For the fourth test case, *cba* -> *bba* -> *aba*.