

The Love-Letter Mystery

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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

```
3
abc
abcba
abcd
```

Sample Output #00

```
2
0
4
```

Explanation

For the first test case, $ab^*c^* \rightarrow ab^*b^* \rightarrow ab^*a^*$.

For the second test case, $abcba$ is a palindromic string.

For the third test case, $abc^*d^* \rightarrow abc^*c^* \rightarrow abc^*b^* \rightarrow abc^*a^* = ab^*c^*a \rightarrow ab^*b^*a$.