Problem 9: Beauty - A TESTING PROBLEM

Overview

Psychologists have discovered that much of our ideas about beauty relate to how symmetric ones features are. Indeed, studies show that by reflecting an image laterally, scientists can increase the perceived beauty of a person in a photograph. The more asymmetries shown, the lower viewers rate the attractiveness of the subject.

Problem

In this problem, you will be given a string rather than a photograph. You are to compute the “Beauty Index”. The beauty index is the percentage of symmetries that a string shows, i.e. the percentage of its letters that are symmetric, i.e. that would appear in the same place if the string were reversed. Since the center character of an odd-length string would be guaranteed to be in the same place, such a character is ignored for purposes of determining the Beauty Index.

Input

The input to this problem is a single string of between 2 and 101 (inclusive) lower case letters.

Output

The output is a single integer representing the Beauty Index. Note that all percentages round down; thus if the precise percentage is 28.57…%, the Beauty Index is nonetheless reported as 28.

Example 1

Input

sarah

Output

50

- over -
Example 2

Input

stephen

Output

0

Example 3

Input

hannah

Output

100

About TESTING PROBLEMS

YOU ARE NOT TO WRITE A SOLUTION TO THIS PROBLEM!!!!

Rather, a flawed\(^1\) solution to this problem exists on the web page referenced by the submission program on your desktop. You must determine an input set for which our solution gives the wrong answer. You will also need to supply the correct output for the input that you submit. Once you have determined these, you must fill in the fields on the web page and submit your answer.

\(^1\) The judges apologize for the pun. The language of this paragraph was written years ago, long before this particular problem was conceived.