

7382 Simplicity

For a string of letters, define the *Simplicity* of the string to be the number of distinct letters in the string. For example, the string ‘string’ has simplicity 6, and the string ‘letter’ has simplicity 4.

You like strings which have simplicity either 1 or 2. Your friend has given you a string and you want to turn it into a string that you like. You have a magic eraser which will delete one letter from any string. Compute the minimum number of letters you must erase in order to turn the string into a string with simplicity at most 2.

Input

The input file contains several test cases.

Each of them will consist of a line with a single string consisting of at least 1 and at most 100 lowercase letters.

Output

For each test case, output a single line with a integer indicating the minimum number of letters you need to erase in order to give the string a simplicity of 1 or 2.

Sample Input

```
string
letter
aaaaaa
uncopyrightable
ambidextrously
assesses
assassins
```

Sample Output

```
4
2
0
13
12
1
2
```