



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

Each input will consist of a single test case. Note that your program may be run multiple times on different inputs. The input will consist of a line with a single string consisting of at least 1 and at most 100 lowercase letters.

Output

Output a single integer, indicating the minimum number letters you need to erase in order to give the string a simplicity of 1 or 2.

Sample Input

Sample Output

string	4
letter	2
aaaaaa	0
uncopyrightable	13
ambidextrously	12
assesses	1
assassins	2