

Problem

Submissions

Leaderboard

Discussions

Editorial

Sherlock considers a string to be valid if all characters of the string appear the same number of times. It is also valid if he can remove just **1** character at **1** index in the string, and the remaining characters will occur the same number of times. Given a string ***s***, determine if it is valid. If so, return YES, otherwise return NO.

Example

s = *abc*

This is a valid string because frequencies are ***{a : 1, b : 1, c : 1}***.

s = *abcc*

This is a valid string because we can remove one ***c*** and have **1** of each character in the remaining string.

s = *abccc*

This string is not valid as we can only remove **1** occurrence of ***c***. That leaves character frequencies of ***{a : 1, b : 1, c : 2}***.

Function Description

Complete the isValid function in the editor below.

isValid has the following parameter(s):

- string s: a string

Returns

- string: either YES or NO

Input Format

A single string ***s***.

Constraints

- $1 \leq |s| \leq 10^5$
- Each character $s[i] \in ascii[a - z]$

Sample Input

aabbcd

Sample Output

NO

Explanation

2 is the minimum number of removals required to make it a valid string. It can be done in following two ways:

Remove c and d to get aabb.

Or remove a and b to get abcd.

```
10 # Complete the 'isValid' function below.
11 #
12 # The function is expected to return a STRING.
13 # The function accepts STRING s as parameter.
14 #
15
16 def isValid(s):
17     (fre_map, fre_map2) = ({}, {})
18
19     for char in s: fre_map[char] = fre_map.get(char, 0) + 1
20     for value in fre_map.values(): fre_map2[value] = fre_map2.get(value, 0) + 1
21
22     size = len(fre_map2.values())
23
24     if size == 1: return 'YES'
25
26     if size == 2:
27         tuples = [(key, value) for (key, value) in fre_map2.items()]
28         tuples.sort(reverse=True, key=lambda x: x[1])
29
30         if tuples[1][1] == 1 and tuples[1][0] == 1: return 'YES'
31         if tuples[1][1] == 1 and abs(tuples[1][0] - tuples[0][0]) == 1: return 'YES'
32
33     return 'NO'
34
35
36 # Kunal Wadhwa
37
38
39
40
41
42
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44
45
46
47
48
49
```

Line: 10 Col: 1

Upload Code as File

Test against custom input

Run Code

Submit Code

Congratulations

You solved this challenge. Would you like to challenge your friends?



Next Challenge

Test case 13

Test case 14

Test case 15

Test case 16

Test case 17

Test case 18

Test case 19

Compiler Message

Success

Input (stdin)

Download

1 aabbcd

Expected Output

Download

1 NO