Sherlock and the Valid String



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*.

For example, if s = abc, it is a valid string because frequencies are $\{a:1,b:1,c:1\}$. So is s = abcc because we can remove one c and have 1 of each character in the remaining string. If s = abccc however, the string is not valid as we can only remove 1 occurrence of c. That would leave character frequencies of $\{a:1,b:1,c:2\}$.

Input Format

A single string s.

Constraints

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

Output Format

Print YES if string s is valid, otherwise, print NO.

Sample Input 0

aabbcd

Sample Output 0

NO

Explanation 0

Given s = "aabbcd", we would need to remove two characters, both c and d \rightarrow aabb or a and b \rightarrow abcd, to make it valid. We are limited to removing only one character, so s is *invalid*.

Sample Input 1

aabbccddeefghi

Sample Output 1

NO

Explanation 1

Frequency counts for the letters are as follows:

```
{'a': 2, 'b': 2, 'c': 2, 'd': 2, 'e': 2, 'f': 1, 'g': 1, 'h': 1, 'i': 1}
```

There are two ways to make the valid string:

• Remove 4 characters with a frequency of 1: {fghi}.

• Remove **5** characters of frequency **2**: **{abcde}**.

Neither of these is an option.

Sample Input 2

abcdefghhgfedecba

Sample Output 2

YES

Explanation 2

All characters occur twice except for e which occurs ${\bf 3}$ times. We can delete one instance of e to have a valid string.