

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

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

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** → **aabb** or **a** and **b** → **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

```
abcdefghhgfedcba
```

Sample Output 2

```
YES
```

Explanation 2

All characters occur twice except for *e* which occurs **3** times. We can delete one instance of *e* to have a valid string.