

Sherlock and Valid String

Problem Statement

You know my powers, my dear Watson, and yet at the end of three months I was forced to confess that I had at last met an antagonist who was my intellectual equal.

A "valid" string is a string S such that for all distinct characters in S each such character occurs the same number of times in S .

For example, `aabb` is a valid string because the frequency of both characters `a` and `b` is 2 , whereas `aabbc` is not a valid string because the frequency of characters `a`, `b`, and `c` is not same.

Watson gives a string S to Sherlock and asks him to remove some characters from the string such that the new string is a "valid" string.

Sherlock wants to know from you if it's possible to be done with less than or equal to one removal.

Input Format

First and only line contains S , the string Watson gives to Sherlock.

Output Format

Output `YES` if string S can be converted to a "valid" string by removing less than or equal to one character.

Else, output `NO`.

Constraints:

$1 \leq \text{size of string} \leq 10^5$

String S contains small alphabets(`a-z`) only.

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`.