Dothraki are planning an attack to usurp King Robert's throne. King Robert learns of this conspiracy from Raven and plans to lock the single door through which the enemy can enter his kingdom.

But, to lock the door he needs a key that is an anagram of a palindrome. He starts to go through his box of strings, checking to see if they can be rearranged into a palindrome.

For example, given the string $s = [aabbccdd]$, one way it can be arranged into a palindrome is $abcddcba$.

Function Description

Complete the *gameOfThrones* function below to determine whether a given string can be rearranged into a palindrome. If it is possible, return `YES`, otherwise return `NO`.

gameOfThrones has the following parameter(s):

- *s*: a string to analyze

Input Format

A single line which contains s, the input string.

Constraints

- $1 \leq |s| \leq 10^5$
- s contains only lowercase letters in the range $ascii[a \ldots z]$

Output Format

A single line which contains `YES` or `NO`.

Sample Input 0

```
aaabbbb
```

Sample Output 0

```
YES
```

Explanation 0

A palindromic permutation of the given string is *bbaaabb*.

Sample Input 1

```
cdefghmnopqrstuvw
```

Sample Output 1

```
NO
```

Explanation 1

Palindromes longer than 1 character are made up of *pairs* of characters. There are none here.

Sample Input 2

```
cdcdcdcdeeeef
```

Sample Output 2

```
YES
```

Explanation 2

An example palindrome from the string: *ddcceefeeccdd*.