Game of Thrones - I



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.

Complete the GameOfThrones function below to determine whether a given string can be rearranged into a palindrome.

Input Format

A single line which contains s, the input string.

Constraints

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

Output Format

A single line which contains YES or NO in uppercase.

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.