Bloomberg CODECON

Memory Limit: 1024 MB
Time Limit: 5 s

A Compliance Problem (125 points)

Introduction

As part of a team project to build an instant messaging program, you have to work around your teammate's **buggy compliance** filter.

The compliance filter works based on an algorithm which determines if certain messages can pass through the system and if they should be flagged. Usually the compliance filter system has a dictionary of black listed words which it filters out.

However, due to your teammate's programming error the compliance filter system appears to only allow words that are palindromes or anagrams of palindromes (i.e. can make a palindrome when re-arranged).

For example:

- abba
- aabb (this one is an anagram of abba or baab)
- civic
- deified
- mom
- mmo
- radar

While a fix is being worked on, you are tasked with writing an add on that will determine if a word **can pass** through the this system.

Input Specifications

Your program will take

- A **string S** denoting the word to be tested. All letters in the alphanumeric input will be lowercase **(1 ≤ LENGTH(S) ≤ 500)**, and there may be numbers and symbols.

Output Specifications

Based on the input,

- Print out **yes** if the input would pass through the system
- Print out **no** if the input would fail the system

Sample Input/Output

Input

abba

Output

yes

Explanation

abba is already a palindrome.

Input

```
nnmm
```

Output

```
yes
```

Explanation

While nnmm isn't a palndirome, it can be re-arranged to make one; nmmn and mnnm are palindromes that can pass through the system.

Input

```
trail
```

Output

```
no
```

Explanation

trail isn't a palindrome, nor an anagram of a palindrome, and therefore will not pass through the system.