

Make It Palindrome

Input file: `standard input`
Output file: `standard output`
Time limit: 2 seconds
Memory limit: 256 megabytes

Oussama always likes to challenge his friends Anass, Said and Ayoub in codingame clash-of-code. Last time they tried to play the site was down, so Oussama decided to give his friends a coding challenge that he created himself. Unfortunately, none of them could solve it, therefore he decided to put this easy task in a CPC contest. The statement goes as follows...

You are given a string S consisting of lower case letters only, you need to know if you can rearrange its characters in a way to make it a palindrome string. If you can do so, print "YES", otherwise print "NO".

A palindrome is a string that reads the same backward as forward, for example strings "x", "anasana", "aba", "abccba" are palindromes, but strings "abaa", "awbx" are not.

Input

One single line consists of a string S , ($1 \leq \text{length of } S \leq 1000$).

Output

Output "YES" if you can make it palindrome, otherwise print "NO".

Examples

standard input	standard output
aabb	YES
aabbxa	NO