

## A. Mike and palindrome

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

Mike has a string  $s$  consisting of only lowercase English letters. He wants to **change exactly one** character from the string so that the resulting one is a palindrome.

A palindrome is a string that reads the same backward as forward, for example strings "z", "aaa", "aba", "abccba" are palindromes, but strings "codeforces", "reality", "ab" are not.

### Input

The first and single line contains string  $s$  ( $1 \leq |s| \leq 15$ ).

### Output

Print "YES" (without quotes) if Mike can change **exactly** one character so that the resulting string is palindrome or "NO" (without quotes) otherwise.

### Examples

input	Copy
abccaa	
output	Copy
YES	

input	Copy
abbcca	
output	Copy
NO	

input	Copy
abcda	
output	Copy
YES	