

Mock CCC '18 Contest 3 J2 - A Palindrome Problem

Time limit: 1.0s **Memory limit:** 1G

Given a string, determine if it can be partitioned into two nonempty substrings, both of which are palindromes.

Constraints

$$1 \leq N \leq 8$$

The only letters that appear are `a` and `b`.

Input Specification

The input consists of a single string of length N .

Output Specification

If the string can be partitioned into two nonempty substrings, both of which are palindromes, output `YES`.

Output `NO` otherwise.

Sample Input 1

```
a
```

Sample Output 1

```
NO
```

Sample Input 2

```
aa
```

Sample Output 2

YES