A. Square String?

A string is called *square* if it is some string written twice in a row. For example, the strings "aa", "abcabc", "abab" and "baabaa" are square. But the strings "aaa", "abaaab" and "abcdabc" are not square.

For a given string s determine if it is square.

Input
The first line of input data contains an integer t ($1 \le t \le 100$) —the number of test cases.

This is followed by t lines, each containing a description of one test case. The given strings consist only of lowercase Latin letters and have lengths between 1 and 100 inclusive.

Output
For each test case, output on a separate line:

- YES if the string in the corresponding test case is square,
- NO otherwise.

You can output YES and NO in any case (for example, strings yEs, yes, Yes and YES will be recognized as a positive response).

Example

input
10 a aa aaa aaaa abab abcabc abacaba xxyy xyyx xyxy

output
NO YES NO YES YES YES NO NO NO YES