# **Longest Prefix Suffix**

Submissions: 16559 (/problem\_submissions.php?pid=1285) Accuracy: 41.5% Difficulty: Medium (https://practice.geeksforgeeks.org/Medium/0/0/) Marks: 4

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#### **Problems**

Given a string of character, find the length of longest proper prefix which is also a proper suffix.

Example:

S = abab

lps is 2 because, ab.. is prefix and ..ab is also a suffix.

#### Input:

First line is T number of test cases. 1<=T<=100.

Each test case has one line denoting the string of length less than 100000.

Expected time compexity is O(N).

## Output:

Print length of longest proper prefix which is also a proper suffix.

## Example:

### Input:

2

abab

aaaa

#### **Output:**

2

3

<sup>\*\*</sup> For More Input/Output Examples Use 'Expected Output' option \*\*