Palindrome Index

Given a string of lowercase letters, determine the index of the character whose removal will make the string a palindrome. If the string is already a palindrome, then print -1. There will always be a valid solution.

Input Format

The first line contains T (the number of test cases).
The T subsequent lines of test cases each contain a single string to be checked.

Constraints
$1 \leq T \leq 20$
$1 \leq$ *length of string* ≤ 100005
All characters are Latin lower case indexed.

Output Format

Print the *zero-indexed* position (integer) of a character whose deletion will result in a palindrome; if there is no such character (i.e.: the string is already a palindrome), print **-1**. Any correct answer will be accepted; e.g.: for a string such as `bcbc`, we can either remove *b* at index 0 or *c* at index 3—both answers are acceptable.

Sample Input

```
3
aaab
baa
aaa
```

Sample Output

```
3
0
-1
```

Explanation

Test Case 1($aaab$): Removing *b* at index 3 results in a palindrome, so we print **3**.

Test Case 2(baa): Removing *b* at index 0 results in a palindrome, so we print **0**.

Test Case 3(aaa): This string is already a palindrome, so we print **-1**; however, **0**, **1**, and **2** are also all acceptable answers, as the string will still be a palindrome if any one of the characters at those indices are removed.

Custom Checker logic

https://gist.github.com/shashank21j/58df3865a95bf960092c