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Test Name:	**Mock Test**
Taken On:	1 Jan 2023 02:31:16 IST
Time Taken:	4 min 5 sec/ 22 min
Invited by:	Ankush
Invited on:	1 Jan 2023 01:44:53 IST
Skills Score:	
Tags Score:	Algorithms 105/105 Core CS 105/105 Easy 105/105 Problem Solving 105/105 Strings 105/105 problem-solving 105/105

100%

105/105

scored in **Mock Test** in 4 min 5 sec on 1 Jan 2023 02:31:16 IST

Recruiter/Team Comments:

No Comments.

Plagiarism flagged

We have marked questions with suspected plagiarism below. Please review.

	Question Description	Time Taken	Score	Status
Q1	Palindrome Index > **Coding**	3 min 58 sec	105/ 105	!

QUESTION 1

Needs Review

Score 105

Palindrome Index > Coding

Strings | Algorithms | Easy | problem-solving | Core CS | Problem Solving

QUESTION DESCRIPTION

Given a string of lowercase letters in the range ascii[a-z], determine the index of a character that can be removed to make the string a palindrome. There may be more than one solution, but any will do. If the word is already a palindrome or there is no solution, return *-1*. Otherwise, return the index of a character to remove.

Example

$s =$ "bcbc"

Either remove *'b'* at index 0 or *'c'* at index 3.

Function Description

Complete the *palindromeIndex* function in the editor below.

palindromeIndex has the following parameter(s):

- *string s:* a string to analyze

Returns

- *int:* the index of the character to remove or -1

Input Format

The first line contains an integer q, the number of queries.
Each of the next q lines contains a query string s.

Constraints

- $1 \leq q \leq 20$
- $1 \leq \text{length of } s \leq 10^5 + 5$
- All characters are in the range ascii[a-z].

Sample Input

```
STDIN   Function
-----   --------
3       q = 3
aaab    s = 'aaab' (first query)
baa     s = 'baa'  (second query)
aaa     s = 'aaa'  (third query)
```

Sample Output

```
3
0
-1
```

Explanation

Query 1: "aaab"
Removing *'b'* at index 3 results in a palindrome, so return 3.

Query 2: "baa"
Removing *'b'* at index 0 results in a palindrome, so return 0.

Query 3: "aaa"
This string is already a palindrome, so return -1. Removing any one of the characters would result in a palindrome, but this test comes first.

Note: The custom checker logic for this challenge is available here.

CANDIDATE ANSWER

Language used: **Python 3**

```
#
# Complete the 'palindromeIndex' function below.
#
# The function is expected to return an INTEGER.
# The function accepts STRING s as parameter.
#

```

```python
def palindromeIndex(s):
    # check if string is palindrome
    if s == s[::-1]:
        return -1

    n = len(s)
    # main logic
    for i in range(n//2):
        # check if first and last are different
        if s[i] != s[n-1-i]:
            if s[i+1:n-i] == s[i+1:n-i][::-1]:
                return i
            elif s[i:n-1-i] == s[i:n-1-i][::-1]:
                return n-1-i
    return -1


```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	Success	0	0.0854 sec	9.34 KB
Testcase 2	Medium	Hidden case	Success	5	0.1038 sec	9.37 KB
Testcase 3	Medium	Hidden case	Success	5	0.0869 sec	9.32 KB
Testcase 4	Medium	Hidden case	Success	5	0.0642 sec	9.2 KB
Testcase 5	Medium	Hidden case	Success	5	0.0715 sec	9.45 KB
Testcase 6	Medium	Hidden case	Success	5	0.1077 sec	9.54 KB
Testcase 7	Medium	Hidden case	Success	5	0.0899 sec	9.6 KB
Testcase 8	Medium	Hidden case	Success	5	0.0977 sec	9.61 KB
Testcase 9	Hard	Hidden case	Success	10	0.0748 sec	9.71 KB
Testcase 10	Hard	Hidden case	Success	10	0.0702 sec	9.69 KB
Testcase 11	Hard	Hidden case	Success	10	0.091 sec	9.57 KB
Testcase 12	Hard	Hidden case	Success	10	0.0911 sec	9.31 KB
Testcase 13	Hard	Hidden case	Success	10	0.1229 sec	9.52 KB
Testcase 14	Hard	Hidden case	Success	10	0.0486 sec	9.57 KB
Testcase 15	Hard	Hidden case	Success	10	0.072 sec	9.61 KB

No Comments