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Test Name:	**Mock Test**
Taken On:	8 Aug 2021 21:49:42 IST
Time Taken:	15 min 30 sec/ 22 min
Invited by:	Ankush
Invited on:	8 Aug 2021 21:49:31 IST
Skills Score:	
Tags Score:	Algorithms 85/105 Core CS 85/105 Easy 85/105 Problem Solving 85/105 Strings 85/105 problem-solving 85/105

81%

85/105

scored in **Mock Test** in 15 min 30 sec on 8 Aug 2021 21:49:42 IST

Recruiter/Team Comments:

No Comments.

	Question Description	Time Taken	Score	Status
Q1	Palindrome Index > **Coding**	15 min 18 sec	85/ 105	✓

QUESTION 1

Correct Answer

Score 85

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

$s = \text{"bcbc"}$

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**

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

def palindromeIndex(s):
    # Write your code here
    for i in range(len(s)//2):
        if s[i] != s[-(i + 1)]:
            # skip the right element
            new_str = s[:i] + s[i + 1:]
            if new_str[:] == new_str[::-1]: # check if it's a palindrome
                return i
            return len(s) - (i + 1)
```

```
            return len(s) - (i + 1)
    return -1
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	Success	0	0.0417 sec	9.37 KB
Testcase 2	Medium	Hidden case	Success	5	0.0414 sec	9.38 KB
Testcase 3	Medium	Hidden case	Success	5	0.0421 sec	9.38 KB
Testcase 4	Medium	Hidden case	Success	5	0.0368 sec	9.39 KB
Testcase 5	Medium	Hidden case	Success	5	0.0378 sec	9.38 KB
Testcase 6	Medium	Hidden case	Success	5	0.0569 sec	9.79 KB
Testcase 7	Medium	Hidden case	Success	5	0.0546 sec	9.68 KB
Testcase 8	Medium	Hidden case	Success	5	0.0684 sec	9.71 KB
Testcase 9	Hard	Hidden case	Success	10	0.0464 sec	9.85 KB
Testcase 10	Hard	Hidden case	Success	10	0.0476 sec	9.7 KB
Testcase 11	Hard	Hidden case	Success	10	0.0545 sec	9.84 KB
Testcase 12	Hard	Hidden case	Success	10	0.0386 sec	9.44 KB
Testcase 13	Hard	Hidden case	Wrong Answer	0	0.0452 sec	9.75 KB
Testcase 14	Hard	Hidden case	Wrong Answer	0	0.0405 sec	9.68 KB
Testcase 15	Hard	Hidden case	Success	10	0.048 sec	9.68 KB

No Comments

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