Full Name:	Remi Chartier
Email:	remipr.chartier@gmail.com
Test Name:	**Mock Test**
Taken On:	26 Nov 2021 04:28:31 IST
Time Taken:	3 min 45 sec/ 30 min
Contact Number:	+14084751573
Linkedin:	http://www.linkedin.com/in/remichartier
Invited by:	Ankush
Invited on:	26 Nov 2021 04:13:24 IST
Skills Score:	
Tags Score:	Algorithms 70/70 Core CS 70/70 Easy 70/70 Strings 70/70 problem-solving 70/70

100%

70/70

scored in **Mock Test** in 3 min 45 sec on 26 Nov 2021 04:28:31 IST

Recruiter/Team Comments:

No Comments.

	Question Description	Time Taken	Score	Status
Q1	Anagram > **Coding**	3 min 33 sec	70/ 70	✓

QUESTION 1

Correct Answer

Score 70

Anagram > Coding

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

QUESTION DESCRIPTION

Two words are *anagrams* of one another if their letters can be rearranged to form the other word.

Given a string, split it into two contiguous substrings of equal length. Determine the minimum number of characters to change to make the two substrings into anagrams of one another.

Example

$s = \text{abccde}$

Break s into two parts: 'abc' and 'cde'. Note that all letters have been used, the substrings are contiguous and their lengths are equal. Now you can change 'a' and 'b' in the first substring to 'd' and 'e' to have 'dec' and 'cde' which are anagrams. Two changes were necessary.

Function Description

Complete the *anagram* function in the editor below.

anagram has the following parameter(s):

- *string s:* a string

Returns

- *int:* the minimum number of characters to change or -1.

Input Format

The first line will contain an integer, q, the number of test cases.
Each test case will contain a string s.

Constraints

- $1 \leq q \leq 100$
- $1 \leq |s| \leq 10^4$
- s consists only of characters in the range ascii[a-z].

Sample Input

```
6
aaabbb
ab
abc
mnop
xyyx
xaxbbbxx
```

Sample Output

```
3
1
-1
2
0
1
```

Explanation

Test Case #01: We split s into two strings $S1$='aaa' and $S2$='bbb'. We have to replace all three characters from the first string with 'b' to make the strings anagrams.

Test Case #02: You have to replace 'a' with 'b', which will generate "bb".

Test Case #03: It is not possible for two strings of unequal length to be anagrams of one another.

Test Case #04: We have to replace both the characters of first string ("mn") to make it an anagram of the other one.

Test Case #05: $S1$ and $S2$ are already anagrams of one another.

Test Case #06: Here *S1 = "xaxb"* and *S2 = "bbxx"*. You must replace 'a' from *S1* with 'b' so that *S1 = "xbxb"*.

CANDIDATE ANSWER

Language used: **Python 3**

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

```
#

def anagram(s):
    # Write your code here
    count = 0
    if len(s) % 2 != 0:
        return -1
    half = int(len(s)/2)
    # split string into 2 lists of equal length
    s1 = list(s[0:half])
    s2 = list(s[half:])
    count_s1 = {}
    for c in s1:
        if count_s1.get(c) == None:
            count_s1[c] = 1
        else:
            count_s1[c] += 1
    for c in count_s1.keys():
        if count_s1[c] > s2.count(c):
            count += count_s1[c] - s2.count(c);

    return count


```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Hidden case	Success	5	0.0592 sec	9.47 KB
Testcase 2	Easy	Hidden case	Success	5	0.0447 sec	9.46 KB
Testcase 3	Easy	Hidden case	Success	5	0.0584 sec	9.39 KB
Testcase 4	Easy	Hidden case	Success	5	0.0429 sec	9.48 KB
Testcase 5	Easy	Hidden case	Success	5	0.0519 sec	9.42 KB
Testcase 6	Easy	Hidden case	Success	5	0.5017 sec	9.52 KB
Testcase 7	Easy	Hidden case	Success	5	0.1653 sec	9.59 KB
Testcase 8	Easy	Hidden case	Success	5	0.4947 sec	9.61 KB
Testcase 9	Easy	Hidden case	Success	5	0.1538 sec	9.6 KB
Testcase 10	Easy	Hidden case	Success	5	0.4688 sec	9.62 KB
Testcase 11	Easy	Hidden case	Success	5	0.1682 sec	9.54 KB
Testcase 12	Easy	Hidden case	Success	5	0.4927 sec	9.53 KB
Testcase 13	Easy	Hidden case	Success	5	0.4787 sec	9.44 KB
Testcase 14	Easy	Hidden case	Success	5	0.4674 sec	9.59 KB
Testcase 15	Easy	Sample case	Success	0	0.0506 sec	9.4 KB
Testcase 16	Easy	Sample case	Success	0	0.0442 sec	9.3 KB

No Comments