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Test Name: Mock Test

Taken On: 9 Apr 2023 12:51:37 IST

Time Taken: 20 min 22 sec/ 30 min

Invited by: Ankush

Invited on: 9 Apr 2023 12:51:23 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 20 min
22 sec on 9 Apr 2023 12:51:37
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	Anagram > Coding	20 min 14 sec	70/ 70	!

QUESTION 1

!

Needs Review

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 = 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
xaxbbbx
```

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: **C**

```
1 #include <math.h>
```

```

2 #include <stdio.h>
3 #include <string.h>
4 #include <stdlib.h>
5 #include <assert.h>
6 #include <limits.h>
7 #include <stdbool.h>
8 int anagram(char* s){
9     // Complete this function
10    int l=strlen(s),c=0;
11    if(l%2 != 0)
12        return -1;
13    int h1[26]={0},h2[26]={0},i;
14    for(i=0;i<l/2;i++)
15        h1[s[i]-'a']++;
16    for(i=l/2;i<l;i++)
17        h2[s[i]-'a']++;
18    for(i=0;i<26;i++)
19    {
20        h1[i]=h1[i]-h2[i];
21        if(h1[i]>0)
22            c=c+abs(h1[i]);
23    }
24    return c;
25 }
26
27 int main() {
28     int q;
29     scanf("%i", &q);
30     for(int a0 = 0; a0 < q; a0++){
31         char* s = (char *)malloc(512000 * sizeof(char));
32         scanf("%s", s);
33         int result = anagram(s);
34         printf("%d\n", result);
35     }
36     return 0;
37 }

```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Hidden case	✔ Success	5	0.0505 sec	7.42 KB
Testcase 2	Easy	Hidden case	✔ Success	5	0.0547 sec	7.39 KB
Testcase 3	Easy	Hidden case	✔ Success	5	0.0228 sec	7.46 KB
Testcase 4	Easy	Hidden case	✔ Success	5	0.0221 sec	7.54 KB
Testcase 5	Easy	Hidden case	✔ Success	5	0.057 sec	7.71 KB
Testcase 6	Easy	Hidden case	✔ Success	5	0.0365 sec	8.5 KB
Testcase 7	Easy	Hidden case	✔ Success	5	0.0586 sec	8.13 KB
Testcase 8	Easy	Hidden case	✔ Success	5	0.0544 sec	8.47 KB
Testcase 9	Easy	Hidden case	✔ Success	5	0.0711 sec	8.2 KB
Testcase 10	Easy	Hidden case	✔ Success	5	0.0558 sec	8.59 KB
Testcase 11	Easy	Hidden case	✔ Success	5	0.0561 sec	8.08 KB
Testcase 12	Easy	Hidden case	✔ Success	5	0.0398 sec	8.62 KB
Testcase 13	Easy	Hidden case	✔ Success	5	0.0337 sec	8.46 KB
Testcase 14	Easy	Hidden case	✔ Success	5	0.0363 sec	8.67 KB
Testcase 15	Easy	Sample case	✔ Success	0	0.0198 sec	7.55 KB
Testcase 16	Easy	Sample case	✔ Success	0	0.0568 sec	7.4 KB

