

# Mock Test > yashuuu930@gmail.com

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scored in **Mock Test** in 76 min 1 sec on 17 Aug 2025 16:33:02 IST

# **Recruiter/Team Comments:**

No Comments.

	Question Description	Time Taken	Score	Status
Q1	Palindrome Index > Coding	26 min 28 sec	40/ 105	<b>Ø</b>
Q2	Between Two Sets > Coding	17 min 26 sec	60/ 105	<b>Ø</b>
Q3	Anagram > Coding	30 min 40 sec	5/ 70	<b>⊘</b>



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  ${\it q}$ , the number of queries.

Each of the next q lines contains a query string s.

### **Constraints**

- $1 \le q \le 20$
- $1 \le \text{length of } s \le 10^5 + 5$
- 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.

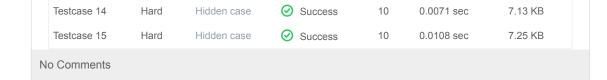
Note: The custom checker logic for this challenge is available here.

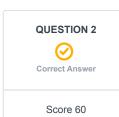
### **CANDIDATE ANSWER**

Language used: C

```
3 * Complete the 'palindromeIndex' function below.
4 *
5 * The function is expected to return an INTEGER.
6 * The function accepts STRING s as parameter.
7 */
8
9 bool isPalindrome(char *s, int 1, int r)
10 {
     while (1 < r) {
        if(s[1] != s[r]){
          return false;
        }
14
         1++;
         r--;
     }
     return true;
20 }
21 int palindromeIndex(char* s) {
     int n= strlen(s);
     int l=0, r=n-1;
24
      while(l < r) {
         if(s[l] != s[r]){
             if(isPalindrome(s,l+1,r))
                 return 1;
             if(isPalindrome(s, l, r-1)){
                 return r;
             }
         }
         1++;
         r--;
     }
     return -1;
39 }
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
TESTCASE	DIFFICULIY	TYPE	_	SCORE	TIME TAKEN	
Testcase 1	Easy	Sample case	Wrong Answer	0	0.0074 sec	7.38 KB
Testcase 2	Medium	Hidden case	Wrong Answer	0	0.0094 sec	7 KB
Testcase 3	Medium	Hidden case	Wrong Answer	0	0.0068 sec	7.13 KB
Testcase 4	Medium	Hidden case	Wrong Answer	0	0.007 sec	7.13 KB
Testcase 5	Medium	Hidden case	Wrong Answer	0	0.0087 sec	7.38 KB
Testcase 6	Medium	Hidden case	Wrong Answer	0	0.0077 sec	7.25 KB
Testcase 7	Medium	Hidden case	Wrong Answer	0	0.0076 sec	7.38 KB
Testcase 8	Medium	Hidden case	Wrong Answer	0	0.0085 sec	7.75 KB
Testcase 9	Hard	Hidden case	Wrong Answer	0	0.007 sec	7.25 KB
Testcase 10	Hard	Hidden case	Wrong Answer	0	0.008 sec	7.13 KB
Testcase 11	Hard	Hidden case	Wrong Answer	0	0.0069 sec	7.63 KB
Testcase 12	Hard	Hidden case	Success	10	0.0077 sec	7.13 KB
Testcase 13	Hard	Hidden case	Success	10	0.0084 sec	7.25 KB





Between Two Sets > Coding Math Algorithms Easy gcd Data Structures LCM sets

problem-solving Core CS greatest common divisor Least Common Multiple

#### QUESTION DESCRIPTION

There will be two arrays of integers. Determine all integers that satisfy the following two conditions:

- 1. The elements of the first array are all factors of the integer being considered
- 2. The integer being considered is a factor of all elements of the second array

These numbers are referred to as being between the two arrays. Determine how many such numbers exist.

### Example

$$a = [2, 6]$$
  
 $b = [24, 36]$ 

There are two numbers between the arrays: 6 and 12.

$$6\%2 = 0$$
,  $6\%6 = 0$ ,  $24\%6 = 0$  and  $36\%6 = 0$  for the first value.

$$12\%2 = 0$$
,  $12\%6 = 0$  and  $24\%12 = 0$ ,  $36\%12 = 0$  for the second value. Return 2.

#### **Function Description**

Complete the *getTotalX* function in the editor below. It should return the number of integers that are betwen the sets.

getTotalX has the following parameter(s):

- int a[n]: an array of integers
- int b[m]: an array of integers

# Returns

• int: the number of integers that are between the sets

### **Input Format**

The first line contains two space-separated integers, n and m, the number of elements in arrays a and b. The second line contains n distinct space-separated integers a[i] where  $0 \le i < n$ .

The third line contains m distinct space-separated integers b[j] where  $0 \leq j < m$ .

# Constraints

- $1 \le n, m \le 10$
- $1 \le a[i] \le 100$
- $1 \le b[j] \le 100$

# Sample Input

2 3 2 4 16 32 96

### **Sample Output**

3

# **Explanation**

2 and 4 divide evenly into 4, 8, 12 and 16.

4, 8 and 16 divide evenly into 16, 32, 96.

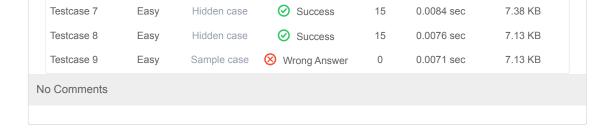
4, 8 and 16 are the only three numbers for which each element of a is a factor and each is a factor of all elements of b.

### **CANDIDATE ANSWER**

Language used: C

```
2 /*
 3 * Complete the 'getTotalX' function below.
 4 *
 5 * The function is expected to return an INTEGER.
 * The function accepts following parameters:
7 * 1. INTEGER ARRAY a
8 * 2. INTEGER ARRAY b
9 */
10 int gcd(int a, int b)
11 {
     while(b!=0){
      int temp =b;
        b=a%b;
         a =temp;
     }
      return a;
18 }
   int lcm(int a, int b) {
      return(a*b)/gcd(a,b);
22 }
23 int getTotalX(int a_count, int* a, int b_count, int* b) {
    int l=a[0];
     for( int i=1; i<a count;i++) {
         l=lcm(l,a[i]);
     int g=b[0];
     for(int i=1; i<b count; i++){
         g=gcd(g,b[i]);
     int count =0;
     for (int x=1; x \le g; x+=1) {
         if(g%x==0){
              count++;
          }
      return count;
40 }
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	Wrong Answer	0	0.0066 sec	7 KB
Testcase 2	Easy	Hidden case	Wrong Answer	0	0.0081 sec	7.13 KB
Testcase 3	Easy	Hidden case	Success	15	0.0069 sec	7.38 KB
Testcase 4	Easy	Hidden case	Wrong Answer	0	0.0077 sec	7.38 KB
Testcase 5	Easy	Hidden case	Success	15	0.0075 sec	7.13 KB
Testcase 6	Easy	Hidden case	Wrong Answer	0	0.0073 sec	7.13 KB



Core CS



QUESTION DESCRIPTION

Anagram > Coding

Score 5

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

Algorithms

Strings

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.

Easy

problem-solving

### Example

# s = abccde

Break  $\boldsymbol{s}$  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

- $1 \le q \le 100$
- $1 \le |s| \le 10^4$
- $\emph{s}$  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: C

```
2 /*
 3 * Complete the 'anagram' function below.
4 *
   * The function is expected to return an INTEGER.
   * The function accepts STRING s as parameter.
   */
8
9 int anagram(char* s) {
     int n=strlen(s);
      if(n%2 !=0)
           return -1;
14
      int mid =n/2;
      int freq[26]={0};
      for(int i=mid; i<n; i++) {</pre>
           freq[s[i]-'a']++;
       for (int i=mid; i<n; i++) {
           freq[s[i]-'a']--;
24
       int changes =0;
       for(int i=0; i<26; i++){
           if(freq[i]>0){
               changes += freq[i];
           }
       return changes;
34 }
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Hidden case	Wrong Answer	0	0.0072 sec	7 KB
Testcase 2	Easy	Hidden case	Success	5	0.0089 sec	7.25 KB

	Testcase 3	Easy	Hidden case	Wrong Answer	0	0.0096 sec	7.25 KB	
	Testcase 4	Easy	Hidden case	Wrong Answer	0	0.0073 sec	7.13 KB	
	Testcase 5	Easy	Hidden case	Wrong Answer	0	0.0071 sec	7 KB	
	Testcase 6	Easy	Hidden case	Wrong Answer	0	0.017 sec	8.13 KB	
	Testcase 7	Easy	Hidden case	Wrong Answer	0	0.0115 sec	7.25 KB	
	Testcase 8	Easy	Hidden case	Wrong Answer	0	0.0181 sec	8.13 KB	
	Testcase 9	Easy	Hidden case	Wrong Answer	0	0.0091 sec	7.63 KB	
	Testcase 10	Easy	Hidden case	Wrong Answer	0	0.0094 sec	8 KB	
	Testcase 11	Easy	Hidden case	Wrong Answer	0	0.0086 sec	7.5 KB	
	Testcase 12	Easy	Hidden case	Wrong Answer	0	0.0512 sec	7.88 KB	
	Testcase 13	Easy	Hidden case	Wrong Answer	0	0.0165 sec	8.13 KB	
	Testcase 14	Easy	Hidden case	Wrong Answer	0	0.0192 sec	8.13 KB	
	Testcase 15	Easy	Sample case	Wrong Answer	0	0.0069 sec	7 KB	
	Testcase 16	Easy	Sample case	Wrong Answer	0	0.0074 sec	7 KB	
N	o Comments							

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