Mock Test > remipr.chartier@gmail.com



Full Name: Remi Chartier Email: remipr.chartier@gmail.com Test Name: **Mock Test** Taken On: 15 Nov 2021 23:21:22 IST 29 min 46 sec/ 30 min Time Taken: +14084751573 **Contact Number:** http://www.linkedin.com/in/remichartier Linkedin: Ankush Invited by: Invited on: 15 Nov 2021 23:21:12 IST Skills Score: Algorithms 105/105 Tags Score: Core CS 105/105 Data Structures 105/105 105/105 Easy 105/105 LCM Least Common Multiple 105/105 Math 105/105 gcd 105/105 greatest common divisor 105/105

problem-solving 105/105

sets 105/105

100% 105/105

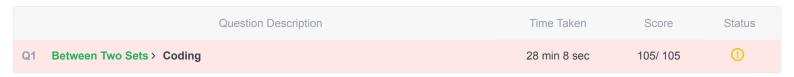
scored in **Mock Test** in 29 min 46 sec on 15 Nov 2021 23:21:22

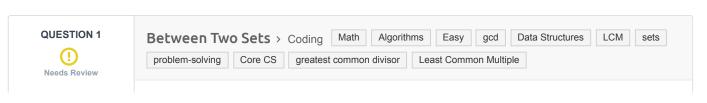
# **Recruiter/Team Comments:**

No Comments.

# Plagiarism flagged

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





Score 105

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

#### **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: Python 3

1 #

2 # Complete the 'getTotalX' function below.

```
3 #
4 # The function is expected to return an INTEGER.
5 # The function accepts following parameters:
6 # 1. INTEGER ARRAY a
7 # 2. INTEGER_ARRAY b
8 #
10 def getTotalX(a, b):
     # Write your code here
      # 1. elements 1st array are all factors of integer being considered
      # 2. integer being considered is a factor of all elements of the 2nd
          # 1. elements 1st array are all factors of integer being considered
      # 2. integer being considered is a factor of all elements of the 2nd
17 array.
     max elem = max(b)
     min_elem = max(a)
     count = 0
     for integer in range(min_elem, max_elem + 1):
          consider elem = True
          for i in a:
             if integer%i != 0:
                  consider_elem = False
                  break;
         if not consider_elem:
             continue
         for i in b:
              if i%integer != 0:
                  consider_elem = False
                  break;
          # here, integer passed all the tests --> count it.
          if consider elem:
              count += 1
     return count
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	Success	0	0.0444 sec	9.48 KB
Testcase 2	Easy	Hidden case	Success	15	0.0435 sec	9.48 KB
Testcase 3	Easy	Hidden case	Success	15	0.0449 sec	9.38 KB
Testcase 4	Easy	Hidden case	Success	15	0.0496 sec	9.39 KB
Testcase 5	Easy	Hidden case	Success	15	0.0441 sec	9.45 KB
Testcase 6	Easy	Hidden case	Success	15	0.0632 sec	9.41 KB
Testcase 7	Easy	Hidden case	Success	15	0.0409 sec	9.27 KB
Testcase 8	Easy	Hidden case	Success	15	0.0483 sec	9.53 KB
Testcase 9	Easy	Sample case	Success	0	0.0402 sec	9.48 KB

No Comments

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