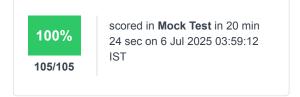


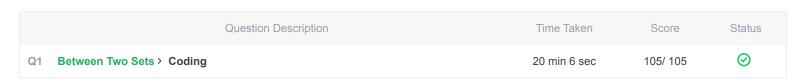
Mock Test > seansanii@outlook.com

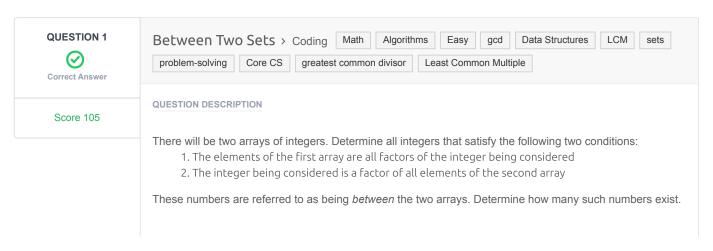
Full Name: Sean Sanii Email: seansanii@outlook.com Test Name: **Mock Test** Taken On: 6 Jul 2025 03:59:12 IST 20 min 24 sec/ 30 min Time Taken: Invited by: Ankush 6 Jul 2025 03:59:06 IST Invited on: Skills Score: Tags Score: Algorithms 105/105 Core CS 105/105 Data Structures 105/105 105/105 Easy LCM 105/105 Least Common Multiple 105/105 105/105 Math 105/105 gcd greatest common divisor 105/105 problem-solving 105/105 sets 105/105



Recruiter/Team Comments:

No Comments.





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++14

```
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  */
9
10 bool isFactor(int number, vector<int> a, vector<int> b)
11 {
```

```
for(int i = 0; i < a.size(); i++)
          if(number % a[i] != 0) // check if a[i] is not a factor of number
            return false;
         }
     }
     for(int i = 0; i < b.size(); i++)
          if(b[i] % number != 0) // check if number is not a factor of b[i]
24
            return false;
     }
      return true;
28 }
30 int getTotalX(vector<int> a, vector<int> b)
31 {
     int start = a[a.size()-1];
      int end = b[0];
34
     int count = 0;
     for(int i = start; i < end+1; i++)
     {
       if(isFactor(i, a , b))
         {
41
              count++;
43
      }
      return count;
45 }
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	Success	0	0.0105 sec	8.63 KB
Testcase 2	Easy	Hidden case	Success	15	0.0096 sec	8.63 KB
Testcase 3	Easy	Hidden case	Success	15	0.0102 sec	8.63 KB
Testcase 4	Easy	Hidden case	Success	15	0.0086 sec	8.63 KB
Testcase 5	Easy	Hidden case	Success	15	0.0083 sec	8.63 KB
Testcase 6	Easy	Hidden case	Success	15	0.0091 sec	8.5 KB
Testcase 7	Easy	Hidden case	Success	15	0.0087 sec	8.63 KB
Testcase 8	Easy	Hidden case	Success	15	0.0081 sec	8.38 KB
Testcase 9	Easy	Sample case	Success	0	0.0085 sec	8.63 KB

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No Comments