

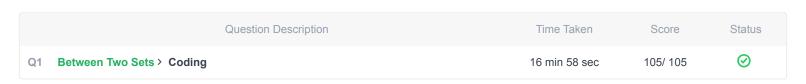
**Full Name:** Đào Nguyễn Huy Hoàng Email: hoang.dnh210380@sis.hust.edu.vn Test Name: **Mock Test** Taken On: 6 Apr 2023 18:28:52 IST Time Taken: 17 min 5 sec/ 30 min Invited by: Ankush Invited on: 6 Apr 2023 18:28:43 IST Skills Score: Tags Score: Algorithms 105/105 Core CS 105/105 Data Structures 105/105 105/105 Easy LCM 105/105 Least Common Multiple 105/105 105/105 Math 105/105 gcd greatest common divisor 105/105 problem-solving 105/105

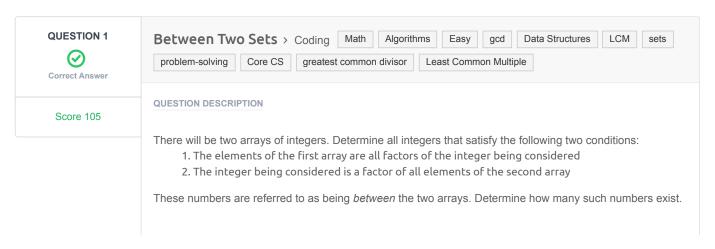
sets 105/105

100% scored in Mock Test in 17 min 5 sec on 6 Apr 2023 18:28:52 IST 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

```
max = i;
           }
14
           return max;
       }
       if (a < b)
           for (int i = 1; i \le a; i++)
           {
               if (a % i == 0) {
                   if (b% i == 0)
                       max = i;
          }
           return max;
       else return a;
29 }
30 int main(){
      int n1, n2, a[1000], b[1000];
       scanf("%d%d",&n1,&n2);
       int BCNN=1;
      for(int i=0;i<n1;i++) {
           scanf("%d",&a[i]);
           BCNN=BCNN*a[i]/UCLN(BCNN,a[i]);
       int minB=1000000;
       for(int i=0;i<n2;i++) {
           scanf("%d", &b[i]);
           if(b[i]<minB ) minB=b[i];</pre>
       int min=1000000;
44
       int result=0;
       for(int i=1;i<=minB/BCNN;i++) {</pre>
          int count=0;
46
47
          for(int j=0;j<n2;j++){
              if (b[j]%(BCNN*i)!=0) count=1;
          if(count==0) result+=1;
       printf("%d", result);
53 }
```

TESTCASE	DIFFICULTY	TYPE	STATUS	SCORE	TIME TAKEN	MEMORY USED
Testcase 1	Easy	Sample case	Success	0	0.0677 sec	7.38 KB
Testcase 2	Easy	Hidden case	Success	15	0.0529 sec	7.51 KB
Testcase 3	Easy	Hidden case	Success	15	0.0295 sec	7.42 KB
Testcase 4	Easy	Hidden case	Success	15	0.0779 sec	7.5 KB
Testcase 5	Easy	Hidden case	Success	15	0.0278 sec	7.5 KB
Testcase 6	Easy	Hidden case	Success	15	0.0896 sec	7.31 KB
Testcase 7	Easy	Hidden case	Success	15	0.0415 sec	7.46 KB
Testcase 8	Easy	Hidden case	Success	15	0.0213 sec	7.38 KB
Testcase 9	Easy	Sample case	Success	0	0.0418 sec	7.3 KB
o Comments						