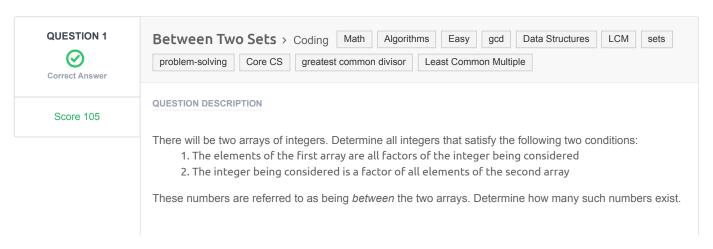




Recruiter/Team Comments:

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 $0 \le j < m$.

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: Python 3

```
def compute_lcm(x, y):
    return (x * y) // math.gcd(x, y)

# # Complete the 'getTotalX' function below.
# # The function is expected to return an INTEGER.
```

```
11 # The function accepts following parameters:
12 # 1. INTEGER ARRAY a
13 # 2. INTEGER ARRAY b
14 #
16 def getTotalX(a, b):
      # Write your code here
       smallest factor a = a[0]
     possible_factors = []
      count = 0
      for num in a:
           smallest factor a = compute lcm(num, smallest factor a)
       factor = smallest_factor_a
      while factor <= min(b):</pre>
           possible_factors.append(factor)
           factor += smallest_factor_a
      for factor in possible_factors:
          is_valid_factor = True
          for num in b:
               if num % factor:
                  is_valid_factor = False
                   break
           if is_valid_factor:
               count += 1
      return count
```

TESTCASEDIFFICULTYTYPESTATUSSCORETIME TAKENMEMORY USEDTestcase 1EasySample case② Success00.0579 sec10.7 KBTestcase 2EasyHidden case② Success150.1036 sec10.6 KBTestcase 3EasyHidden case② Success150.0777 sec10.6 KBTestcase 4EasyHidden case② Success150.0896 sec10.5 KBTestcase 5EasyHidden case② Success150.0468 sec10.6 KBTestcase 6EasyHidden case② Success150.0425 sec10.5 KBTestcase 7EasyHidden case② Success150.0605 sec10.8 KBTestcase 8EasyHidden case② Success150.0426 sec10.7 KBTestcase 9EasySample case③ Success00.0569 sec10.7 KB							
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No Comments