Compare the Triplets ☆

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Problem   Submissions   Leaderboard   Editorial 🔒

Alice and Bob each created one problem for HackerRank. A reviewer rates the two challenges, awarding points on a scale from 1 to 100 for three categories: *problem clarity*, *originality*, and *difficulty*.

We define the rating for Alice's challenge to be the triplet $a = (a[0], a[1], a[2])$, and the rating for Bob's challenge to be the triplet $b = (b[0], b[1], b[2])$.

Your task is to find their *comparison points* by comparing $a[0]$ with $b[0]$, $a[1]$ with $b[1]$, and $a[2]$ with $b[2]$.

- If $a[i] > b[i]$, then Alice is awarded 1 point.

- If $a[i] < b[i]$, then Bob is awarded 1 point.

- If $a[i] = b[i]$, then neither person receives a point.

Comparison points is the total points a person earned.

Given a and b, determine their respective comparison points.

For example, $a = [1, 2, 3]$ and $b = [3, 2, 1]$. For elements 0, Bob is awarded a point because $a[0] < b[0]$. For the equal elements $a[1]$ and $b[1]$, no points are earned. Finally, for elements 2, $a[2] > b[2]$ so Alice receives a point. Your return array would be $[1, 1]$ with Alice's score first and Bob's second.

Function Description

Complete the function *compareTriplets* in the editor below. It must return an array of two integers, the first being Alice's score and the second being Bob's.

compareTriplets has the following parameter(s):

- *a*: an array of integers representing Alice's challenge rating

- *b*: an array of integers representing Bob's challenge rating

Input Format

The first line contains 3 space-separated integers, $a[0]$, $a[1]$, and $a[2]$, describing the respective values in triplet a.
The second line contains 3 space-separated integers, $b[0]$, $b[1]$, and $b[2]$, describing the respective values in triplet b.

Constraints

- $1 \le a[i] \le 100$

- $1 \le b[i] \le 100$

Output Format

Return an array of two integers denoting the respective comparison points earned by Alice and Bob.

Sample Input 0

```
5 6 7
3 6 10
```

Sample Output 0

```
1 1
```

Explanation 0

In this example:

- $a = (a[0], a[1], a[2]) = (5, 6, 7)$

- $b = (b[0], b[1], b[2]) = (3, 6, 10)$

Now, let's compare each individual score:

- $a[0] > b[0]$, so Alice receives 1 point.

- $a[1] = b[1]$, so nobody receives a point.

- $a[2] < b[2]$, so Bob receives 1 point.

Alice's comparison score is 1, and Bob's comparison score is 1. Thus, we return the array $[1, 1]$.

Sample Input 1

```
17 28 30
99 16 8
```

Sample Output 1

```
2 1
```

Explanation 1

Comparing the 0th elements, $17 < 99$ so Bob receives a point.

Comparing the 1st and 2nd elements, $28 > 16$ and $30 > 8$ so Alice receives two points.

The return array is $[2, 1]$.

Current Buffer (saved locally, editable)

Python 3

```python
1  #!/bin/python3
2
3  import math
4  import os
5  import random
```
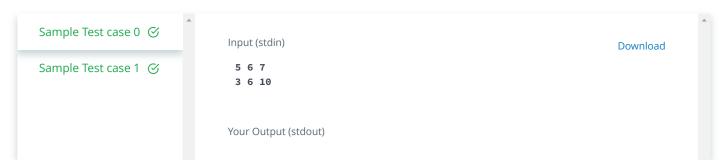
```
 6   import re
 7   import sys
 8
 9   # Complete the compareTriplets function below.
10 ▾ def compareTriplets(a, b):
11 ▾     def compare_sum(tuple_):
12             return sum([x>y for x, y in zip(*tuple_)])
13
14       return map(compare_sum, ((a,b), (b,a)))
15 ▾ '''
16       a_count = 0
17       b_count = 0
18       a_ = a
19       b_ = b
20 ▾     for i, j in zip(a_,b_):
21             #print(a_, b_)
22
23 ▾         if i == j :
24                 #print(i, j, "equal")
25                 continue
26 ▾         elif i>j:
27                 #print(i, j, "greater")
28                 a_count=a_count + 1
29 ▾         else:
30                 #print(i,j, "smaller")
31                 b_count=b_count +1
32       return a_count, b_count
33   '''
34
35
36 ▾ if __name__ == '__main__':
37       fptr = open(os.environ['OUTPUT_PATH'], 'w')
38
39       a = list(map(int, input().rstrip().split()))
40
41       b = list(map(int, input().rstrip().split()))
42
43       result = compareTriplets(a, b)
44
45       fptr.write(' '.join(map(str, result)))
46       fptr.write('\n')
47
48       fptr.close()
49
```

Line: 12 Col: 23

⬆ Upload Code as File   ☐ Test against custom input   **Run Code**   **Submit Code**

Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

| Sample Test case 0 ⊘ |
| Sample Test case 1 ⊘ |

Input (stdin)   Download

5 6 7
3 6 10

Your Output (stdout)

```
1  1
```

Expected Output

```
1  1
```