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Points: 350.43 Rank: 7345

Set .union() Operation

 by DOSHI

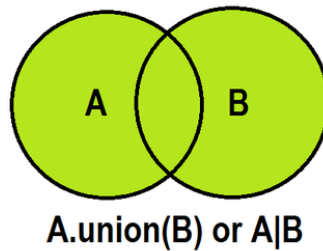
Problem

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BY DOSHI

.union()

The `.union()` operator returns the union of a set and the set of elements in an iterable. Sometimes, the `|` operator is used in place of `.union()` operator, but it operates only on the set of elements in `set`. Set is immutable to the `.union()` operation (or `|` operation).

Example

```
>>> s = set("Hacker")
>>> print s.union("Rank")
set(['a', 'R', 'c', 'r', 'e', 'H', 'k', 'n'])

>>> print s.union(set(['R', 'a', 'n', 'k']))
set(['a', 'R', 'c', 'r', 'e', 'H', 'k', 'n'])

>>> print s.union(['R', 'a', 'n', 'k'])
set(['a', 'R', 'c', 'r', 'e', 'H', 'k', 'n'])

>>> print s.union(enumerate(['R', 'a', 'n', 'k']))
set(['a', 'c', 'r', 'e', (1, 'a'), (2, 'n'), 'H', 'k', (3, 'k'), (0, 'R')])

>>> print s.union({"Rank":1})
set(['a', 'c', 'r', 'e', 'H', 'k', 'Rank'])

>>> s | set("Rank")
set(['a', 'R', 'c', 'r', 'e', 'H', 'k', 'n'])
```

Task

The students of District College have subscriptions to *English* and *French* newspapers. Some students have subscribed only to *English*, some have subscribed to only *French* and some have subscribed to both newspapers.

You are given two sets of student roll numbers. One set has subscribed to the *English* newspaper, and the other set is subscribed to the *French* newspaper. The same student could be in both sets. Your task is to find the total number of students who have subscribed to *at least one* newspaper.

Input Format

The first line contains an integer, n , the number of students who have subscribed to the *English* newspaper.

The second line contains n space separated roll numbers of those students.

The third line contains b , the number of students who have subscribed to the *French* newspaper.

The fourth line contains b space separated roll numbers of those students.

Constraints

$0 < \text{Total number of students in college} < 1000$

Output Format

Output the total number of students who have *at least one* subscription.

Sample Input

```
9
1 2 3 4 5 6 7 8 9
9
10 1 2 3 11 21 55 6 8
```

Sample Output

```
13
```

Explanation

Roll numbers of students who have *at least one* subscription:

1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 21 and **55**. Roll numbers: **1, 2, 3, 6** and **8** are in both sets so they are only counted once. Hence, the total is **13** students.

[f](#) [t](#) [in](#)

Submissions: 5514

Max Score: 10

Difficulty: Easy

Rate This Challenge:

★★★★★ Thanks!

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Python 2

```
1 n1 = input()
2 e = raw_input()
3 el = e.split()
4 es = set(el)
5
6 n2 = input()
7 f = raw_input()
8 fl = f.split()
9 fs = set(fl)
10
11 E = es.difference(fs)
12 F = fs.difference(es)
13 I = es.intersection(fs)
14 result = E.union(F)
15
16 print(len(result)+len(I))
```

Line: 16 Col: 26

[📁](#) Upload Code as File



Test against custom input

Run Code

Submit Code

Congrats, you solved this challenge!

✓ Test Case #0

✓ Test Case #1

✓ Test Case #2

✓ Test Case #3

✓ Test Case #4

✓ Test Case #5

You've earned 10.00 points!

Next Challenge

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