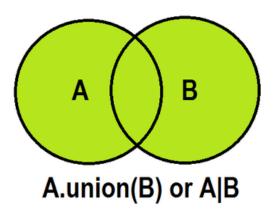
HackerRank

Set .union() Operation



.union()

BY DOSHI

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', 'R', '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 $oldsymbol{n}$ 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 < 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 ${f 13}$ students.