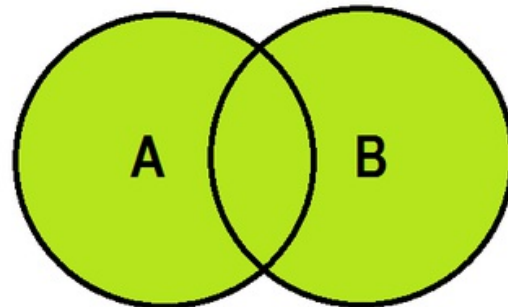


# Set .union() Operation

## Problem Statement



**A.union(B) or A|B**

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.