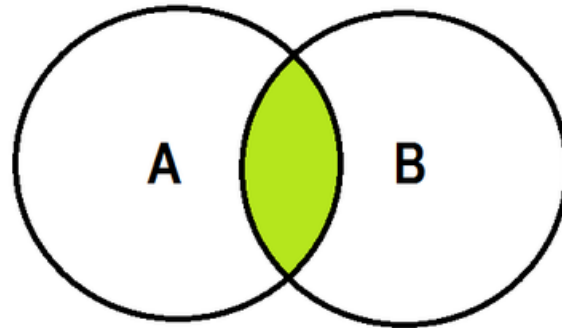# Set .intersection() Operation

A.intersection(B) or A&B

By DOSHI

.intersection()

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

```
>>> s = set("Hacker")
>>> print s.intersection("Rank")
set(['a', 'k'])

>>> print s.intersection(set(['R', 'a', 'n', 'k']))
set(['a', 'k'])

>>> print s.intersection(['R', 'a', 'n', 'k'])
set(['a', 'k'])

>>> print s.intersection(enumerate(['R', 'a', 'n', 'k']))
set([])

>>> print s.intersection({"Rank":1})
set([])

>>> s & set("Rank")
set(['a', 'k'])
```

Task

The students of District College have subscriptions to *English* and *French* newspapers. Some students have subscribed only to *English*, some have subscribed only to *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, one set has subscribed to the *French* newspaper. Your task is to find the total number of students who have subscribed to *both* newspapers.

Input Format

The first line contains 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

$0 < Total\ number\ of\ students\ in\ college < 1000$

Output Format

Output the total number of students who have subscriptions to **both** *English* and *French* newspapers.

Sample Input

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

Sample Output

```
5
```

Explanation

The roll numbers of students who have *both* subscriptions:
$1, 2, 3, 6$ and 8.
Hence, the total is 5 students.