Set .symmetric_difference() Operation
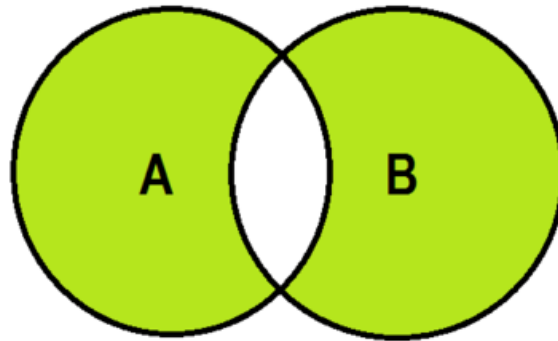

A.symmetric_difference(B) or A^B

by DOSHI

.symmetric_difference()

The *.symmetric_difference()* operator returns a set with all the elements that are in the set and the iterable but not both.

Sometimes, a ^ operator is used in place of the *.symmetric_difference()* tool, but it only operates on the set of elements in *set*.

The set is immutable to the *.symmetric_difference()* operation (or ^ operation).

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

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

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

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

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

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

Task

Students of District College have subscriptions to *English* and *French* newspapers. Some students have subscribed to *English* only, some have subscribed to *French* only, 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 one set has subscribed to the *French* newspaper. Your task is to find the total number of students who have subscribed to either the *English* or the *French* newspaper but *not both*.

Input Format

The first line contains the number of students who have subscribed to the *English* newspaper.
The second line contains the space separated list of student roll numbers who have subscribed to the *English* newspaper.
The third line contains the number of students who have subscribed to the *French* newspaper.
The fourth line contains the space separated list of student roll numbers who have subscribed to the *French* newspaper.

Constraints

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

Output Format

Output total number of students who have subscriptions to the *English* or the *French* newspaper but *not both*.

Sample Input

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

Sample Output

```
8
```

Explanation

The roll numbers of students who have subscriptions to *English* or *French* newspapers but *not both* are:
$4, 5, 7, 9, 10, 11, 21$ and 55.
Hence, the total is 8 students.