Zonal Computing Olympiad 2010, 12 Dec 2009

1:00 pm–4:00 pm IST

Problem 2 : Voting

Elections are on for the Siruseri Town Council. Elections in Siruseri work in a rather odd manner. Each candidate is assigned a unique identification number. The town is divided into five zones and each zone proposes a list of candidates, in some arbitrary order, that it would like to nominate to the Council. Any candidate who is proposed by three or more zones is elected. There is no lower limit or upper limit on the size of the Council.

Your task is to to calculate how many candidates are elected to the Council, given the lists proposed by the five zones.

For example, suppose the candidates proposed by the five zones are as follows:

- *Zone 1:* [12,387,15,162,5]
- *Zone 2:* [14,162,92,387,7,748]
- *Zone 3:* [14,5,12,387]
- *Zone 4:* [17,952,12,92,398,849]
- *Zone 5:* [14,5,92,12,387]

In this example, 5 candidates are elected: these are [12,387,5,14,92].

Input format

The first line of the input contains five integers N_1, N_2 N_3, N_4 and N_5, where N_j is the number of candidates proposed by zone j, $1 \leq j \leq 5$. This is followed by five lines of space separated integers. For $1 \leq j \leq 5$, line j+1 of the input has N_j integers representing the list of candidates proposed by zone j.

Output format

Your output should be a single line consisting of one integer, the total number of candidates elected to the Town Council.

Related:
Overview
Current
Study Material
Online Judge
Archives

Testdata

In all cases, $1 \leq N_1, N_2, N_3, N_4, N_5 \leq 10^6$. Also, each individual list is guaranteed to be free of duplicate entries.

Sample Input

```
5 6 4 6 5
12 387 15 162 5
14 162 92 387 7 748
14 5 12 387
17 952 12 92 398 849
14 5 92 12 387
```

Sample Output

```
5
```