

4. Intersection

Program Name: Intersection.java Input File: intersection.dat

Geoff is working a project that has several sets of data. To complete his project, he must analyze the elements that are common to all sets in his current project. Your job is to write a program for Geoff that will find all elements that appear in all of the sets in a particular project. All data sets contain only positive integers and an integer may appear more than once in the data set.

Input

- The first line of input will contain a single integer p that indicates the number of projects to follow.
- Each project will consist of:
 - o A line containing the number n that indicates the number of sets of data for that project.
 - o Each of the next n lines will contain a finite number of integers, each separated by a single space, which is the data for that particular set of the project.

Note: There will be a minimum of two and a maximum of ten data sets in any project.

Output

For each project, you will print all of the elements that are common to all of the sets in that project in numerical order, on a single line, and separated by whitespace. No integer should be printed more than once even if it appears more than once in all data sets in the project.

If there is no element common to all of the sets in a project, print `NO COMMON ELEMENT FOUND`.

Example Input File

```
3
3
1 2 3 4 5 5
3 4 5 6 7 5
4 5 1 2 3 5 6 7 8 9
5
10 11 15 61 42 14 112 34
12 13 11 61 42 10 34 12 14 112
10 10 13 11 112 54 61 13 13 34
11 112 15 42 13 34 17 10
71 10 11 112 75 63 15 42 34 56 67
4
1 2
3 4 5
6 7 8 9
10 11 12 13 14
```

Example Output to Screen

```
3 4 5
10 11 34 112
NO COMMON ELEMENT FOUND
```