SUGGEST GROUPS

CHALLENGE DESCRIPTION:

You may have noticed that a new feature was added to our web site – user groups. So, this challenge is about joining groups.

You are given a list of users of a social network, friends of each user, and groups the user participates in.

To help users find the most interesting groups, we suggest them joining the groups where ≥50% of their friends participate.

Your task is to write a program which finds a list of suggested groups for each user.

INPUT SAMPLE:

The first argument is a file that contains the information about each user, one user per line. The line is delimited by colon ':' into three parts: user name, list of friends, and list of groups. The items in each part are delimited by comma ','.

For example:

```
Amira:Isaura,Lizzie,Madalyn,Margarito,Shakira,Un:Driving,Mineral collecting
Elliot:Isaura,Madalyn,Margarito,Shakira:Juggling,Mineral collecting
Isaura:Amira,Elliot,Lizzie,Margarito,Verla,Wilford:Juggling
Lizzie:Amira,Isaura,Verla:Driving,Mineral collecting,Rugby
Madalyn:Amira,Elliot,Margarito,Verla:Driving,Mineral collecting,Rugby
Margarito:Amira,Elliot,Isaura,Madalyn,Un,Verla:Mineral collecting
Shakira:Amira,Elliot,Verla,Wilford:Mineral collecting
Un:Amira,Margarito,Wilford:
Verla:Isaura,Lizzie,Madalyn,Margarito,Shakira:Driving,Juggling,Mineral collecting
Wilford:Isaura,Shakira,Un:Driving
```

OUTPUT SAMPLE:

Print to stdout the list of suggested groups for each user. The list of users and the list of groups for each user must be sorted alphabetically.

For example:

```
Isaura:Driving,Mineral collecting
Lizzie:Juggling
Madalyn:Juggling
Margarito:Driving,Juggling
Shakira:Driving,Juggling
Un:Driving,Mineral collecting
```

CONSTRAINTS:

- Number of users in input data is 200.
- Number of different groups in input data is 15.
- There can be users that do not participate in any group.
- Friendship is mutual (if user A is a friend with user B, then user B is a friend with user A).