UCF "Practice" Local Contest — Aug 27, 2016

Soccer Standings

filename: `soccer`
(*Difficulty Level:* `Medium`)

Soccer fever has gripped the world once again, and millions of people from dozens of countries will be glued to their TV sets for the World Cup. Being an enterprising sort, you've started up your own internet World Cup Soccer Channel for streaming matches online. Recently you came up with the idea of filling up the time between matches by having a couple of 'experts' offer critical analysis of games. For this purpose, you have devised a unique ranking system for soccer teams, which you must now implement.

The Problem:

Given a list of teams and a list of match scores, you must compute several quantities for each team. These are: the total number of goals scored over all their games, the total number of goals scored against them (goals allowed, for short), the number of wins, draws and losses, and the number of points scored so far. Points are to be computed as follows: winning a match nets a team 3 points, losing gets them nothing. In the event of a tie, both teams get 1 point.

In addition to this, you must order the teams correctly according to your new system. Teams are ordered according to points, from highest to lowest. In the event of a tie in points, the team that has a higher *goal difference* comes first. The goal difference is defined as the total number of goals scored by the team minus the total number of goals scored against them.

If there is still a tie (i.e., two or more teams have the same points and the same goal differences), the team with higher total goals scored comes first. If even this is tied, the team whose name comes first in alphabetical order goes first.

The Input:

The first input line contains a positive integer, *n*, indicating the number of data sets to be processed. The first line of each data set consists of two positive integers *T (T ≤ 30)* and *G (G ≤ 400)* – the number of teams in this group and the total number of games played by them. The next line contains *T* unique names separated by single spaces. Each name is a single uppercase word with no more than 15 characters.

Each of the next *G* input lines will contain the results of a match. Each line is of the form *<country_1> <score_1> <country_2> <score_2>*. For example, "Greece 2 Nigeria 1" indicates that Greece and Nigeria played a game with score 2-1. All four terms will be separated by single spaces.

The Output:

At the beginning of output for each data set, output "`Group` *g*`:`" where *g* is the data set number, starting from 1. Next you should print a single line for each team, ordering teams as mentioned above. For each team, the line you print should be of the form "<*name*> <*points*> <*wins*> <*losses*> <*draws*> <*goals scored*> <*goals allowed*>". These items should be separated by single spaces. Leave a blank line after the output for each data set.

Sample Input:

```
2
2 1
KASNIA LATVERIA
KASNIA 0 LATVERIA 1
4 6
ENGLAND USA ALGERIA SLOVENIA
ENGLAND 1 USA 1
ALGERIA 0 SLOVENIA 1
SLOVENIA 2 USA 2
ENGLAND 0 ALGERIA 0
SLOVENIA 0 ENGLAND 1
USA 1 ALGERIA 0
```

Sample Output:

```
Group 1:
LATVERIA 3 1 0 0 1 0
KASNIA 0 0 1 0 0 1

Group 2:
USA 5 1 0 2 4 3
ENGLAND 5 1 0 2 2 1
SLOVENIA 4 1 1 1 3 3
ALGERIA 1 0 2 1 0 2
```