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## 11. Office Party

**Program Name:** Office.java

**Input File:** office.dat

Many offices have office parties during the holiday season where people give gifts to some of their co-workers. Sometimes, it seems that one person may give a lot more than they receive while other people receive a lot more than they give. You are to write a program that will determine the net value of the gifts a person receives. The net value of his gifts is the total value of the gifts he received less the amount of money he spent on gifts and could be a negative number. Since each person has a budget, the total value of the gifts he gives will be divided equally among the people receiving his gifts. Do not round or truncate any of these values.

### Input

The first line of input will contain a single integer  $n$  that indicates the number of offices that we will consider. For each office:

- The first line will be a single integer  $m$  that indicates the number of people in the office.
- The next  $m$  lines will contain the following pieces of data, all separated by a space:
  - each person's first name with no spaces,
  - the amount of money he budgeted for the year, and
  - the list of co-workers' first names for whom he bought gifts.

### Output

For each person in the office, you will print his name, a space, and the net value of his gifts rounded to the nearest penny. The list of names for each office should be in alphabetical order and there should be at least one blank line after each office.

### Example Input File

```
2
4
Mary 100 Ann Alex John
Alex 75 Mary John
Ann 80 Mary Alex John
John 100 Ann Mary Alex
5
Roger 200 Aaron Amber Lloyd
Drew 250 Aaron Roger Amber Lloyd
Amber 100 Roger Drew Aaron
Lloyd 150 Amber Drew Roger
Aaron 0
```

### Example Output to Screen

```
Alex 18.33
Ann -13.33
John -2.50
Mary -2.50

Aaron 162.50
Amber 79.17
Drew -166.67
Lloyd -20.83
Roger -54.17
```