# Problem 4 – School system

Write a program that reads a **list of student grade entries** and prints the **average grade** of every **subject** for each student. For example, we are given the following entries:

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| Ivan Ivanov history 5 Ivan Ivanov math 3 Ivan Ivanov math 4 Peter Petrov physics 2 |

There are two students – **Ivan Ivanov** and **Peter Petrov**. Ivan has an average grade in history of **5.00** and in math of **3.50**. Peter has an average grade in physics of **2.00**. We print the students, sorted alphabetically by **fullname**. The **subjects** of each student should also be sorted alphabetically. The result is:

|  |
| --- |
| Ivan Ivanov: [history – 5.00, math – 3.50]  Peter Petrov: [physics – 2.00] |

### Input

The input comes from the console. At the first line a number **n** stays which says how many lines will follow. Each of the next **n** lines holds information in format:

**<First name> <Last name> <subject> <score>**

The input data will always be valid and in the format described. There is no need to check it explicitly.

### Output

Print on the console in a row for each student in the following format:  
**<First name> <Last name>: [<subject> - <average** **score>, <subject> - <average** **score>, …]**

### The subjects of each student should be printed in alphabetical order. Students should be printed in alphabetical order of their full name. The average grade should be rounded to the second decimal.

### Constraints

* The **count** of the entry lines **n** is in the range [1…1000].
* Time limit: 0.3 sec. Memory limit: 16 MB.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 4  Ivan Ivanov history 5 Ivan Ivanov math 3 Ivan Ivanov math 4 Peter Petrov physics 2 | Ivan Ivanov: [history – 5.00, math – 3.50]  Peter Petrov: [physics – 2.00] |