# Problem 4 – Royal Accounting

Royal was very impressed by the legendary dragon Karl Marx, who managed to establish an accounting system for dragons, and decided to make his own one.

You will be given several input lines. This is the format they must follow:

{employeeName};{workHoursPerDay};{dailyPayment};{team}

Team – employee – workHours - dailyIncome

monthly payment(workhours – daily payment)

Where “employee name” and “team name” are **strings**, and must consist only of English alphabet characters, “work hours per day” is an **integer**, and must, obviously, consist only of digits, and “daily payment” is a **floating point** number, it can have digits after the decimal point. Every employee has its own team. There can be more than one employee in a team. **Any** format that does **not** consist **only** of what was, specified above, as a **valid** format, **must** be ignored.

If an employee name **already exists**, you should **ignore** that specific line of input.

When you receive the command “Pishi kuf i da si hodim” - that means Royal got bored of all the accounting and he will not accept any other employee data for the day. That means that you must print the data you have gathered, but in a specific format.

You must order the teams,

by the amount of money every team has gathered, which depends on the sum of the monthly payment of each employee from that team. Each employee’s monthly payment is calculated by his:

**((daily payment \* work hours) / 24) \* 30**

The order of the teams is **descending**, by the criteria specified above.

For every team you must print info about each of its employees.

The employees must also be sorted **first by their work hours** – **descending order**,

second by their **daily income**, which is **(daily payment \* work hours) / 24** – descending order.

If even after that **they are not sorted**, order them **alphabetically**.

### Input

* As input, you will receive several lines containing information, but only those that follow the format, specified above, must be accepted as valid.
* When the command “Pishi kuf i da si hodim” is entered, you must end the input sequence and start the output.

### Output

* The output is simple, you must print every team, and for every team its employees, padded three dollar symbols inside (because Royal loves money), in the following way:
* “Team - {teamName}”
* “$$${employeeName1} – {workHours} – {dailyIncome}
* “$$${employeeName2} – {workHours} – {dailyIncome}
* “{teamName2}…”
* The daily income must be printed to **6** **digits** after the decimal point. See the examples for more info.

### Constraints

* The employee name and team name will always be strings consisting of at least 1 character.
* The valid work hours per day will be an integer in range [-231 + 1, 231 – 1].
* The valid daily payment will be a floating number in range [-264, 264].
* Allowed time/memory: 100ms/16MB.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| Toshko;4;15.56;Trainers  Moni;8;22.768;Trainers  Nasko;12;8.34;Procrastinators  Ivo;12;14;Procrastinators  Pishi kuf i da si hodim | Team - Procrastinators  $$$Ivo - 12 - 7.000000  $$$Nasko - 12 - 4.170000  Team - Trainers  $$$Moni - 8 - 7.589333  $$$Toshko - 4 - 2.593333 |

|  |  |
| --- | --- |
| **Input** | **Output** |
| Karl;4;4;Management  Marx;4;4;Management  Ivo2;1;Management2  Peter;4;4;Management  Pishi kuf i da si hodim | Team - Management  $$$Karl - 4 - 0.666667  $$$Marx - 4 - 0.666667  $$$Peter - 4 - 0.666667 |