## Problem 3 - Plant Discovery

Problem for exam preparation for the Programming Fundamentals Course @SoftUni

Submit your solutions in the SoftUni judge system at [https://judge.softuni.org/Contests/Practice/Index/4046#2](https://judge.softuni.org/Contests/Practice/Index/4046" \l "2).

*You have now returned from your world tour. On your way, you have discovered some new plants, and you want to gather some information about them and create an exhibition to see which plant is highest rated.*

On the **first line,** you will receive a number **n**. On the next **n lines**, you will be given some information about the plants that you have discovered in the format: **"{plant}<->{rarity}"**. **Store** that **information** because you will need it later. If you receive a plant **more than once**, **update** its rarity.

After that, until you receive the **command** **"Exhibition"**, you will be given some of these **commands**:

* **"Rate: {plant} - {rating}"** – **add** the given **rating** to the plant (**store all ratings**)
* **"Update: {plant} - {new\_rarity}"** – **update** the **rarity** of the plant with the **new one**
* **"Reset: {plant}"** – **remove all** the **ratings** of the given plant

**Note: If any given plant name is invalid, print "error"**

After the command **"Exhibition"**, print the information that you have about the plants **following the order in which they were received from the console** in the following format:

**"Plants for the exhibition:  
- {plant\_name1}; Rarity: {rarity}; Rating: {average\_rating}**

**- {plant\_name2}; Rarity: {rarity}; Rating: {average\_rating}  
…**

**- {plant\_nameN}; Rarity: {rarity}; Rating: {average\_rating}"**

The **average rating** should be formatted to the **second decimal place.**

### Input / Constraints

* You will receive the input as **described above**

### Output

* Print the **information** about all plants as **described above**

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 3  Arnoldii<->4  Woodii<->7  Welwitschia<->2  Rate: Woodii - 10  Rate: Welwitschia - 7  Rate: Arnoldii - 3  Rate: Woodii - 5  Update: Woodii - 5  Reset: Arnoldii  Exhibition | Plants for the exhibition:  - Arnoldii; Rarity: 4; Rating: 0.00  - Woodii; Rarity: 5; Rating: 7.50  - Welwitschia; Rarity: 2; Rating: 7.00 |
| 2  Candelabra<->10  Oahu<->10  Rate: Oahu - 7  Rate: Candelabra - 6  Exhibition | Plants for the exhibition:  - Candelabra; Rarity: 10; Rating: 6.00  - Oahu; Rarity: 10; Rating: 7.00 |