# SoftUni Coffee Supplies

Alex is having hard time ordering coffee recently, because the new members of the team drink too much coffee. You need to help her. At the **beginning of the input**, you will receive the **keywords** for the week. Those keywords are delimiters, that Alex will use for the rest of the input. Alex will tell you **what coffee, everyone drinks**. She **should** also tell you **the quantity for each coffee type**, but **she might forget**, so you will have to assume that there in **none** left.

After you receive **all of the information** you need, you must **check how much coffee you have**, and if there in **none left from certain type**, you **must tell Alex, to order more**. Then you must monitor how much coffee each member of the team drinks. If a **coffee type ends**, you must **tell Alex to order** more. After the **end of the week**, you need to **print reports**. The **first report** should **print how much coffee is left**. It should be in the **following format**:

“coffeeType count”

This report **must** **be** **sorted** by the count for each **coffee** **type** in **descending** **order**.

The second report should tell us **which team members** have some coffee left, and what is the type of the coffee. The report **must be sorted** by coffee type **lexicographically**. If there are **team members** that drink the **same type of coffee**, their **names** **must** **be** **sorted** **lexicographically in descending order**.

### Input

* On the first line you are given the two delimiters separated by (space).
* On the next lines, until you receive “end of info” you are given one of the following lines:
  + “PersonName[firstDelimiter]CoffeeType”
  + “CoffeeType[secondDelimiter]Quantity”
* On the next lines, until you receive “end of week” you will receive how much coffee everyone drinks in the following format:
  + “PersonName count”

### Output

* When you run out of a coffee type you must print:
  + “Out of {coffeeType}”
* After you receive the command “end of week” you must print the following reports:
  + “Coffee Left:”
  + “{coffeeType} {quantity}” – All coffee types that have more than 0 quantity, sorted in **descending order by quantity**
  + “For:”
  + “{personName} {coffeeType}” – For each of the coffeeTypes from the previous report, print the team members drinking **each type of coffee**. This report must be **sorted in lexicographical order for each coffee type**. If there is **more than 1 team member** drinking the **same coffeeType**, **order them alphabetically in descending order**.

### Constraints

* The **two delimiters** will always be **different** strings
* The **Coffee Quantity** will be valid integer in the range **[0...231]**

### Examples

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| **Input** | **Output** |
| . -  Nakov.Espresso Ricco  Trifon.Voix de la Terre  Voix de la Terre-2  Espresso Ricco-5  end of info  Nakov 3  Trifon 1  Nakov 2  end of week | Out of Espresso Ricco  Coffee Left:  Voix de la Terre 1  For:  Trifon Voix de la Terre |
| **Input** | **Output** |
| Bojo Slav  SimoBojoBevanda Bianca  PeshoBojoConsomme  ConsommeSlav50  ToshkoBojoConsomme  RoyalBojoCafe Crema Dolce  MeriBojoEspresso Amabile  AlexBojoEspresso Amabile  Espresso AmabileSlav10  Bevanda BiancaSlav2  Espresso AmabileSlav10  Espresso AmabileSlav13  RosiBojoEspresso Delicato  Espresso DelicatoSlav5  end of info  Simo 1  Pesho 20  Toshko 2  Rosi 3  Meri 2  Meri 2  Alex 5  Meri 5  Rosi 2  end of week | Out of Cafe Crema Dolce  Out of Espresso Delicato  Coffee Left:  Consomme 28  Espresso Amabile 19  Bevanda Bianca 1  For:  Simo Bevanda Bianca  Toshko Consomme  Pesho Consomme  Meri Espresso Amabile  Alex Espresso Amabile |