# Problem 4 – Arena Tier

Pesho is a pro gladiator, he is struggling to become master of the Arena. // TODO some more story

You will receive **several input lines** in one of the following formats:

"{gladiator} -> {technique} -> {skill}"

"{gladiator} vs {gladiator}"

The gladiator and technique are strings, the given **skill** will be an integer number. You need to keep track of **every gladiator**.

When you receive a **gladiator and his technique and skill**, add him to the gladiator pool, if he isn`t present, else add his technique or update his skill, only if the current technique skill is lower than the new value.

If you receive **"{gladiator} vs {gladiator}"** and both gladiators exist in the tier, they duel with the following rules:

Compare their techniques, if they got at least one in common, the gladiator with better total skill points wins and the other is demoted from the tier -> remove him.

If they don`t have techniques in common, the duel isn`t happening and both continue in the Season.

You should end your program when you receive the command "Ave Cesar". At that point you should print the gladiators, **ordered by total skill in desecending order, then ordered by name in ascending order**. Foreach gladiator print their technique and skill, **ordered desecending, then ordered by technique name in ascending order**

## Input / Constraints

You will receive input on several lines.

* The input comes in the form of commands in one of the formats specified above.
* Gladiator and technique **will always be one word string, containing no whitespaces**.
* Skill will be an **integer** in the **range [0, 1000]**.
* There will be **no invalid** input lines.
* The programm ends when you receive the command "Ave Cesar".

## Output

* The output format for each gladiator is:

"{gladiator}: {totalSkill} skill"

"- {technique} <!> {skill}"

***Scroll down to see examples.***

## Examples

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comments** |
| Pesho -> BattleCry -> 400  Gosho -> PowerPunch -> 300  Stamat -> Duck -> 200  Stamat -> Tiger -> 250  Ave Cesar | Stamat: 450 skill  - Tiger <!> 250  - Duck <!> 200  Pesho: 400 skill  - BattleCry <!> 400  Gosho: 300 skill  - PowerPunch <!> 300 | We order the gladiators by total skill points descending, then by name. We print every technique along its skill ordered descending by skill, then by technique name. |
| **Input** | **Output** |  |
| Pesho -> Duck -> 400  Julius -> Shield -> 150  Gladius -> Heal -> 200  Gladius -> Support -> 250  Gladius -> Shield -> 250  Pesho vs Gladius  Gladius vs Julius  Gladius vs Gosho  Ave Cesar | Gladius: 700 skill  - Support <!> 250  - Shield <!> 250  - Heal <!> 200  Pesho: 400 skill  - Duck <!> 400 | Gladius and Pesho don`t have common technique, so the duel isn`t valid.  Gladius wins vs Julius /common technique: "Shield". Julius is demoted.  Gosho doesn`t exist so the duel isn`t valid.  We print every gladiator left in the tier. |