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 an **array of strings** as a parameter to your solution.

- 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.
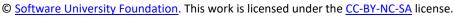- The programm ends when you receive the command **"Ave Cesar"**.

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.