# The V-Logger

As you know vlogging (making short videos instead of written blogposts) is the new super trend among young people. You have always been very passionate about vloggers and their videos and now you decided to create a website, called "The V-Logger", so to rank the most followed vloggers. Good thing that you are also a programmer, so you can easily track what vloggers do.

You need to implement functionality that allows **vloggers to register** in your website. Note that, every vlogger must have a **unique vloggername**, so to be recognizable by his followers.

**Vloggers** also like to **follow other vloggers**, so that they can see immediately when a new video is posted.

A vlogger **can follow** **as many other vloggers** **as he wants**, but he **cannot** follow **himself** or follow someone he is **already a follower** of.

### Input

The **input** will come as e sequence of strings, where each string will represent a **valid** command. The commands will be presented in the following format:

* "{vloggername}" **joined The V-Logger** – a vlogger got registered into your website.
  + Vloggernames **consist** **of only one word**.
  + If the **given** vloggername **is already taken ignore that command.**
* "{vloggername} followed {vloggername}" – The first vlogger followed the second vlogger.
  + If **any** of the **given vlogernames** **does not exist** in the log **ignore that command.**
* **"Statistics" -** Upon receiving this command you have to print a statistic about the registered vloggers in **"The** **V-Logger".**

### Output

* On the first line you have to print **the total amount of vloggers** using “The V-Logger” in format:

**"The V-Logger has a total of {registered vloggers} vloggers in its logs."**

* Then you have to find most famous vlogger (thevlogger with the most followers). He should be printed along with **his followers**, in the following format:

"**1.** {vlogger} : {followers} followers, {vloggers he is a follower of} following

**\*** {follower1}

\* {follower2} ... "

* + If more than one vloggers have the same number of followers, you find **the one following less people**
  + The **followers** should be printed in **lexicographical order**.
  + If the vlogger has **no followers**, print only the **first line.**
* Last print **all other vloggers**, ordered by **number of followers (descending)** and **number of followings (ascending)** in the following format:

"**{No}.** {vlogger} : {followers} followers, {vloggers he is a follower of} following**"**

### Constraints

* There will be no invalid input.
* There will be no situation where two vloggers have equal amount of followers and equal amount of followings
* The subscribers will be strings.
* Allowed time/memory: **100ms/16MB**.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| EmilConrad joined The V-Logger  VenomTheDoctor joined The V-Logger  Saffrona joined The V-Logger  Saffrona followed EmilConrad  Saffrona followed VenomTheDoctor  EmilConrad followed VenomTheDoctor  VenomTheDoctor followed VenomTheDoctor  Saffrona followed EmilConrad  Statistics | The V-Logger has a total of 3 vloggers in its logs.  1. VenomTheDoctor : 2 followers, 0 following  \* EmilConrad  \* Saffrona  2. EmilConrad : 1 followers, 1 following  3. Saffrona : 0 followers, 2 following |
| JennaMarbles joined The V-Logger  JennaMarbles followed Zoella  AmazingPhil joined The V-Logger  JennaMarbles followed AmazingPhil  Zoella joined The V-Logger  JennaMarbles followed Zoella  Zoella followed AmazingPhil  Christy followed Zoella  Zoella followed Christy  JacksGap joined The V-Logger  JacksGap followed JennaMarbles  PewDiePie joined The V-Logger  Zoella joined The V-Logger  Statistics | The V-Logger has a total of 5 vloggers in its logs.  1. AmazingPhil : 2 followers, 0 following  \* JennaMarbles  \* Zoella  2. Zoella : 1 followers, 1 following  3. JennaMarbles : 1 followers, 2 following  4. PewDiePie : 0 followers, 0 following  5. JacksGap : 0 followers, 1 following |