Followers

Now that Pesho has successfully created an account, he wants to connect with other users and gain as many followers, likes and comments as possible.

Create a program that keeps information about Pesho's **followers**, **likes** and **comments.** Keep a record of the followers, each with the likes and comments Pesho has received from them.

You will be receiving **lines** with commands until you receive the **"Log out"** command. There are four **possible** commands:

- **"New follower: {username}":**
  - **Add** the **username**, to your **records** (with 0 likes and 0 comments). **If** person with the given **username** already **exists ignore the line**.
- **"Like: {username}: {count}":**
  - If the username **doesn't** exist, **add** it to your records with the given count of likes.
  - If the username **exist**, **increase** the count of likes with the given count.
- **"Comment: {username}":**
  - If the username **doesn't** exist, **add** it to your records with **1 comment**.
  - If the username **exists**, **increase** the count of commens with **1**.
- **"Blocked: {username}":**
  - **Delete** all records of the given username. If it doesn't exist, print:
    "{Username} doesn't exist."

In the end, you have to **print the count of followers, each follower** with his/her **likes and comments** (the **sum** of **likes** and **comments**) sorted in **descending order** by the **likes** and **then by** their **username** in **ascending** order in the following format:

`{count} followers`

`{username}: {likes+comments}`

`{username}: {likes+comments}`

`...`

Input

- You will be receiving lines until you receive the **"Log out"** command.
- The input will **always** be **valid**.

Output

- Print the users with their **likes** in the **format** described above.

Examples

Input	Output
New follower: gosho Like: gosho: 5 Comment: gosho New follower: gosho New follower: tosho Comment: gosho Comment: tosho Comment: pesho Log out	3 followers gosho: 7 pesho: 1 tosho: 1
Input	**Output**
Like: A: 3 Comment: A New follower: B Blocked: A Comment: B Like: C: 5 Like: D: 5 Log out	3 followers C: 5 D: 5 B: 1