## 4.Book Shelf

Write a function that stores information about **shelves** and the **books on the shelves**. Each shelf has an **Id** and a **genre** of books that can be on it. Each book has a **title**, an **author,** and a **genre**. The input comes as an **array of strings**. They will be in the format:  
**"{shelf id} -> {shelf genre}"** – create a shelf **if the id is not taken**.  
**"{book title}: {book author}, {book genre}"** – if a shelf with that **genre exists**, add the book to the shelf.  
After finishing reading input, sort the shelves by a **count of books** in it in **descending**. For each shelf sort the **books by title** in ascending. Then print them in the following format.  
**"{shelfOne id} {shelf genre}: {books count}  
--> {bookOne title}: {bookOne author}  
--> {bookTwo title}: {bookTwo author}  
…  
{shelfTwo id} {shelf genre}: {books count}  
…"**

### Example

|  |  |
| --- | --- |
| **Input** | **Output** |
| ['1 -> history', '1 -> action', 'Death in Time: Criss Bell, mystery', '2 -> mystery', '3 -> sci-fi', 'Child of Silver: Bruce Rich, mystery', 'Hurting Secrets: Dustin Bolt, action', 'Future of Dawn: Aiden Rose, sci-fi', 'Lions and Rats: Gabe Roads, history', '2 -> romance', 'Effect of the Void: Shay B, romance', 'Losing Dreams: Gail Starr, sci-fi', 'Name of Earth: Jo Bell, sci-fi', 'Pilots of Stone: Brook Jay, history'] | 3 sci-fi: 3  --> Future of Dawn: Aiden Rose  --> Losing Dreams: Gail Starr  --> Name of Earth: Jo Bell  1 history: 2  --> Lions and Rats: Gabe Roads  --> Pilots of Stone: Brook Jay  2 mystery: 1  --> Child of Silver: Bruce Rich |
| ['1 -> mystery', '2 -> sci-fi',  'Child of Silver: Bruce Rich, mystery',  'Lions and Rats: Gabe Roads, history',  'Effect of the Void: Shay B, romance',  'Losing Dreams: Gail Starr, sci-fi',  'Name of Earth: Jo Bell, sci-fi'] | 2 sci-fi: 2  --> Losing Dreams: Gail Starr  --> Name of Earth: Jo Bell  1 mystery: 1  --> Child of Silver: Bruce Rich |