# Problem 1 – Concert

*Mandy was hired to accept the group applications for the upcoming concert. She thought that it would be easy but now she is in trouble. She needs a programmer to make an application that will help her to safe the concert. She needs you.*

You will read commands until you receive **"start of concert"** command.

There are **two types** of commands:

* "**Add;** **{bandName}; {member 1}, {member 2}, {member 3}"** - applies a band and a **list of members** to the concert. All members must be **unique** so don't add duplicates. If you receive the **same band** twice add only those members that **aren't present** in the list.
* **"Play; {bandName}; {time}"** – the band with the given name plays an **amount of time** on the stage. If you receive a **band** that has **already** **applied** in the concert, just **increase** the band **time.**

If in both commands the band **does not exist**, add it.

At the end you have to print the **total time** and the bands ordered by the **time** on stage in **descending** order, then by **band name** in **ascending** order.

Also the **final input line** will be "**{bandName}**" and you have to print **all members** for this band in **insertion order**.

## Input / Constraints

* The **time** of the bands – **integer** in range **[0 – 231 - 1]**
* There will always be at least one **member** in the group
* The bands will always have **time** on stage
* The final input line will always contain an **existing** band name
* Input will always be valid and in the range specified. You don’t need to check it

## Output

**Total time: {totalTime}**

**{firstBandName} -> {firstBandTime}**

**{secondBandName} -> {secondBandTime}**

**{thirdBandName} -> {thirdBandTime}**

**…**

**{bandName}**

**=> {firstMemberName}**

**=> {secondMemberName}**

**=> {thirdMemberName}**

**…**

## Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| Play; The Beatles; 2584  Add; The Beatles; John Lennon, Paul McCartney, George Harrison, Ringo Starr  Add; Eagles; Glenn Frey, Don Henley, Bernie Leadon, Randy Meisner  Play; Eagles; 1869  Add; The Rolling Stones; Brian Jones, Mick Jagger, Keith Richards  Add; The Rolling Stones; Brian Jones, Mick Jagger, Keith Richards, Bill Wyman, Charlie Watts, Ian Stewart  Play; The Rolling Stones; 4239  start of concert  The Rolling Stones | Total time: 8692  The Rolling Stones -> 4239  The Beatles -> 2584  Eagles -> 1869  The Rolling Stones  => Brian Jones  => Mick Jagger  => Keith Richards  => Bill Wyman  => Charlie Watts  => Ian Stewart |
| Add; The Beatles; John Lennon, Paul McCartney  Add; The Beatles; Paul McCartney, George Harrison  Add; The Beatles; George Harrison, Ringo Starr  Play; The Beatles; 3698  Play; The Beatles; 3828  start of concert  The Beatles | Total time: 7526  The Beatles -> 7526  The Beatles  => John Lennon  => Paul McCartney  => George Harrison  => Ringo Starr |