# Problem 4 – Nuts

You are given a sequence of **n** companies in format **<company> <nuts> <amount>**. Example:

* KingNuts almonds 250kg
* Rois cashews 14kg
* EatYourNuts almonds 15kg
* Rois wallnuts 14kg
* EatYourNuts brazilnuts 15kg
* Rois wallnuts 14kg
* EatYourNuts almonds 15kg

Write a program that prints **all companies** by name **alphabetically**. For each company print the **type of nuts** they ordered and sum the ordered amounts. Order the nuts by **order of appearance**. Print the result in the following format: **<company>: <nut> <amount>kg, <nut> <amount>kg,…** For the orders above the output should be:

* EatYourNuts: almonds-30kg, brazilnuts-15kg
* KingNuts: almonds-250kg
* Rois: cashews-14kg, wallnuts-28kg

### Input

The input comes from the console. At the first line the number **n** stays alone. At the next **n** lines, we have **n** orders in format **<company> <nut> <amount>kg**.

The input data will always be valid and in the format described. There is no need to check it explicitly.

### Output

Print **one line for each company**. Company lines should be ordered in **alphabetical** **order**. For each company print the **nuts** ordered by this company in **order** of **appearance**, along with the total amount of nuts followed by **"kg"**, each company in format **<company>: <nut>-<amount>, <nut>-<amount>, …**

### Constraints

* The **count** of the lines **n** will be in the range [1…100].
* The **<company>** and **<nut>** will consist of only of **Latin characters**, with length of [1…20].
* The **<amount>** will be integer number in the range [1…1000].
* Time limit: 0.3 sec. Memory limit: 16 MB.

### Examples

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |
| 7  KingNuts almonds 250kg  Rois cashews 14kg  EatYourNuts almonds 15kg  Rois wallnuts 14kg  EatYourNuts brazilnuts 15kg  Rois wallnuts 14kg  EatYourNuts almonds 15kg | EatYourNuts: almonds-30kg, brazilnuts-15kg  KingNuts: almonds-250kg  Rois: cashews-14kg, wallnuts-28 kg | 5  Nutie wallnuts 20kg  Nutie almonds 20kg  Nutie cashews 20kg  Nutie cashews 20kg  Nutie almonds 20kg | Nutie: wallnuts-20kg, almonds-40kg, cashews-40kg |