**Problem 3 - Monthly Report**



*Maria has a bakery shop. Now she needs your help to write a program to manage the shop's monthly report.*

Create a program that keeps the information about the distributors and the clients of Maria's bakery. Every month Maria receives or returns some ingredients (for baking) from/ to distributors, and she sells the baked goods in her bakery. You will be receiving **lines** with commands until you receive the **"End"** command. The **possible** commands are:

* **"Deliver {DistributorName} {MoneySpent}"** means that Maria has been delivered some ingredients for baking the goods that she will sell in her bakery:
  + If the **distributor** **does not** exist, **add** them and the money spent to your record.
  + Keep track of the **money spent** on the **delivered ingredients** for each of the **distributors.**
  + If the **distributor** with this **name** exists, just increase the value of **the money** in their record.
* **"Return {DistributorName} {MoneyReturned}"** means that Maria returns the ingredients that she does not need, or she had purchased by mistake, and the distributor give her back the spend money:
  + **Decrease** the **money** of the given **distributor** with the **given amount.** If the **cost** **of the ingredients** becomes **0**, you should **remove the distributor**.
  + If the **distributor** is **not on the record, ignore the command**.
  + If the **money** **spent** to the given distributor are **less than the** **given amount** (money returned), **ignore** **the** **command**.
* **"Sell {ClientName} {MoneyEarned}"** means that Maria sold some goods to a client, and **she earned** a certain amount of money:
  + If the **client** **does not** exist, **add** the client’s name to your record.
  + If the **client** exists, just increase the **money earned from that client** in her/ his record.
  + **You must keep track of the money spent by each client and the total money spent by all clients!**

**Input**

* You will be receiving linesuntil you receive the **"End"** command.
* **Distributor's Name**: string
* **MoneySpent**: double/ float in range [0.00, 10000.00]
* **MoneyReturned**: double/ float in range [0.00, 10000.00]
* **Client's Name**: string
* **Money Earned**: double/ float in range [0.00, 10000.00]

## Output

* **First, on separate lines, print all clients** and the **money spent** by each of them.
* **On the following lines, print all the distributors** and the total cost of **ingredients** purchased from distributors.
* **On the last line,** print the **total money spent by customers** (the total income) in the format below.
* **All money/ costs should be formatted to the second decimal point.**

**"{ClientName1}: {TotalMoneyEarnedFromThatCustomer1}**

**{ClientName2}: {TotalMoneyEarnedFromThatCustomer2}**

...

**{ClientNameN}: {TotalMoneyEarnedFromThatCustomer3}**

**-----------**

**{Distributor1}: {TotalMoneySpentToThatDistributor1}**

**{Distributor2}: {TotalMoneySpentToThatDistributor2}**

...

**{DistributorM}: {TotalMoneySpentToThatDistributorM}**

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**Total Income: {TotalMoneyEarnedFromCustomers}"**

## Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| Deliver Micro 10000.00  Sell Nick 500.00  Sell Antony 260.50  Deliver Micro 2000.50  End | Nick: 500.00  Antony: 260.50  -----------  Micro: 12000.50  -----------  Total Income: 760.50 |
| Deliver North 200.30  Sell Peter 30.20  Return Macro 5000.00  Return North 100.30  Sell Peter 50.50  End | Peter: 80.70  -----------  North: 100.00  -----------  Total Income: 80.70 |
| Deliver North 200.30  Deliver Micro 10000.00  Deliver North 150.50  End | -----------  North: 350.80  Micro: 10000.00  -----------  Total Income: 0.00 |

## JS Examples

The input will be provided as an array of strings.

|  |  |
| --- | --- |
| **Input** | **Output** |
| ([**"**Deliver Micro 10000.00**"**,  **"**Sell Nick 500.00**"**,  **"**Sell Antony 260.50**"**,  **"**Deliver Micro 2000.50**"**,  **"**End**"**]) | Nick: 500.00  Antony: 260.50  -----------  Micro: 12000.50  -----------  Total Income: 760.50 |
| ([**"**Deliver North 200.30**"**,  **"**Sell Peter 30.20**"**,  **"**Return Macro 5000.00**"**,  **"**Return North 100.30**"**,  **"**Sell Peter 50.50**"**,  **"**End **"**]) | Peter: 80.70  -----------  North: 100.00  -----------  Total Income: 80.70 |
| ([**"**Deliver North 200.30**"**,  **"**Deliver Micro 10000.00**"**,  **"**Deliver North 150.50**"**,  **"**End**"**]) | -----------  North: 350.80  Micro: 10000.00  -----------  Total Income: 0.00 |