

C++ Fundamentals Exam

The following tasks should be submitted to the SoftUni Judge system.

Task 1 – Shopping List

Help Tom go to the supermarket. He has a list of Shopping Items with price and count of each of them.

Input

- On the **first line**, you are given an integer **number of Shopping items**.
- On the **next lines**, you are given:
 - Name of Shopping Items**
 - Price of Item**
 - Shopping Item's Count**

Note: There can only be one item with the same name.

Output

- Print the total sum of the products – "The total sum is: {total sum} lv."
- Sort the Shopping Items by their **final price**.
 - The final price is calculated by multiplying the Shopping Item's **count** by the Shopping Item's **price** ($\text{finalPrice} = \text{count} * \text{price}$)

Note: If there are two or more items with the same price, print them in the order of their entrance.

Examples

Input	Output
5	The total sum is: 17.4 lv.
Milk	Rice 4.5
2	Cheese 4.1
2	Milk 4
Eggs	Eggs 2.4
0.4	Carrots 2.4
6	
Carrots	
0.3	
8	
Rice	
1.5	
3	
Cheese	
4.1	
1	

Input	Output
6	The total sum is: 21.5 lv.
Banana	Banana 6
0.6	Cake 4.7
10	Cream 4.4
Cream	Soda 3
2.2	Bread 2.8
2	Cucumber 0.6
Bread	
1.4	
2	
Soda	
1	
3	
Cucumber	
0.3	
2	

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Cake	
4.7	
1	