# Problem 3. Apartments

## Input / Constraints

We have the task to create database for a businessman, who buys apartments in different neighborhoods here in Sofia.

At the first stage he does a research for available apartments. He will give you **a neighborhood name** and **a list of block numbers** in format:

**{neighborhood} -> {block\_num,block\_num,block\_num}**

When you receive the command ‘**collectApartments**’ you should **stop adding research results** and **start assigning them with the real data**. Note that the businessman can give you a **neighborhood or a block number which haven’t been researched**. In this case just **do nothing**, but if he gives you **a researched neighborhood and a researched block number in this neighborhood assign the values for it.** The data will come in the following format:

**{ neighborhood}&{block\_number} -> {count\_of\_available\_apartments}|{price\_for\_one\_apartment}**

It’s **possible** to receive **existing neighborhood** and **block\_number** and **already assigned** **count\_of\_available\_apartments** with given **price**. In this case **REPLACE the old** info with the new one.

## Output

## When you recieve a command which says 'report', you should print all apartments data ordered by name of the neighborhood ascending after that by block\_number ascending in the following format:

**Neighborhood: {neighborhood}**

**\* Block number: {block\_number} -> { count\_of\_available\_apartments } apartments for sale. Price for one: {price\_for\_one\_apartment }**

* **If there is no available apartments** in this block in this neighborhood **just print 0** for the available apartments count.
* **If there is no price**, **just print** for price\_for\_one\_apartment **‘None’**.

## Examples

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comments** |
| Lozenec -> 11,2  Durvenica -> 4,3  Mladost1 -> 5,2  Mladost2 -> 7,8  collectApartments  Lozenec&11 -> 2|100000  Lozenec&2 -> 1|100000  Durvenica&3 -> 5|80000  Durvenica&5 -> 15|80000  Mladost2&13 -> 6|80000  Mladost1&13 -> 7|79000  report | Neighborhood: Durvenica  \* Block number: 3 -> 5 apartments for sale. Price for one: 80000  \* Block number: 4 -> 0 apartments for sale. Price for one: None  Neighborhood: Lozenec  \* Block number: 2 -> 1 apartments for sale. Price for one: 100000  \* Block number: 11 -> 2 apartments for sale. Price for one: 100000  Neighborhood: Mladost1  \* Block number: 2 -> 0 apartments for sale. Price for one: None  \* Block number: 5 -> 0 apartments for sale. Price for one: None  Neighborhood: Mladost2  \* Block number: 7 -> 0 apartments for sale. Price for one: None  \* Block number: 8 -> 0 apartments for sale. Price for one: None | Here we are just collecting data for researched apartments.We receive the first data we should assign.We check that we have Lozenec in researched apartments and check that we have this block number. We have it so we store the info.We repeat the same for the next line.After that we receive another  Neighborhood and again we check if we have the information for this block number in this neighborhood.We have it so we add it.On the next line we see we have the neighborhood, but we do not have this block number there, so we skip this info.We order everything and print it. Note that we have researched block numbers but there weren’t any apartments so the data for them is 0 and None! |
| **Input** | **Output** | **Comments** |
| StudentskiGrad -> 11,2  KrasnaPolyana -> 5,2  Borovo -> 4,3  KrasnaPolyana -> 5,8  collectApartments  StudentskiGrad&2 -> 3|100000  Lozenec&2 -> 1|100000  Durvenica&3 -> 5|80000  Durvenica&5 -> 15|80000  Mladost2&13 -> 6|80000  Mladost1&13 -> 7|79000  report | Neighborhood: Borovo  \* Block number: 3 -> 0 apartments for sale. Price for one: None  \* Block number: 4 -> 0 apartments for sale. Price for one: None  Neighborhood: KrasnaPolyana  \* Block number: 2 -> 0 apartments for sale. Price for one: None  \* Block number: 5 -> 0 apartments for sale. Price for one: None  \* Block number: 8 -> 0 apartments for sale. Price for one: None  Neighborhood: StudentskiGrad  \* Block number: 2 -> 3 apartments for sale. Price for one: 100000  \* Block number: 11 -> 0 apartments for sale. Price for one: None |  |