# Problem 4 – Vehicle Park

You are manager on a vehicle park. Your job is to sell cars and give reports to the accounting. You will be given all vehicles that are available for selling in format like the example below:

**c2 c4 v10 v20 b50**

Each car is described by **vehicle type** (single character ‘**b**’, ‘**c**’ or ‘**v**’) and **amount of seats** in the vehicle (natural number). For example, **“c4”** means **car with 4 seats**, “**b50**” means **bus with 50 seats** and “**v10**” means **van with 10 seats**.

You need to **process** a sequence of **incoming requests**. Each request holds **type of vehicle** and **amount of seats** in the following format:

**Car with 4 seats**

**Bus with 20 seats**

**…**

If you have **vehicle** that **matches** the description of the **desired vehicle**, you should **sell it**, otherwise print “**No**”. The **price** is calculated as а **product** of the **character ASCII code** andthe **number of seats**. For example, the **price** for “**c4**” (**car with 4 seats**), will be calculated as **99(‘c’) \* 4 = 396**. If there are **2 or more matching vehicles** you should **sell the leftmost** one.

After you **run out of customers**, you need to **print the vehicles** that you **didn’t sell** and the **count of sold vehicles**.

## Input

The input data should be read from the console.

* On the **first input line** you will receive **all vehicles** in the park, separated with **single whitespace**.
* On the nextlines you will receive **requests for vehicles** in the following format:

“**{Vehicle Type} with {Amount of seats} seats**”

until you receive **“End of customers!”**

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

## Output

The output should consist of:

* For **each vehicle request** you either need to **print**:
  + “Yes, sold for {price}$” – if the **wanted vehicle** is **available** in the park.
  + “No” – if there is no such vehicle in the vehicle park.
* After you **stop receiving request**, you need to **print** **two** **lines**:
  + On the first line you need to print the remaining vehicles in the format:

“Vehicles left: x1, x2, x3…”

* + On the second line you need to print the total amount of vehicles sold in the following format: “Vehicles sold: x1, x2, x3…”

## Constraints

* The **amount of vehicles** will be in range [**0 – 10,000**].
* The **amount of request** for vehicles will be in range [**0 – 10,000**].
* The **amount of seats** for **each vehicle** will be in range [**1 – 10,000**].
* The **vehicle type** can only be one of the following **Car – c**; **Bus – b**; **Van – v;**
* Allowed working time for your program: 0.1 seconds. Allowed memory: 16 MB.

## Examples

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comments** |
| c2 c4 v10 v20 b50  Car with 4 seats  Bus with 20 seats  Bus with 33 seats  Van with 20 seats  Bus with 50 seats  End of customers! | Yes, sold for 396$  No  No  Yes, sold for 2360$  Yes, sold for 4900$  Vehicles left: c2, v10  Vehicles sold: 3 | c4 -> 99(‘c’) \* 4 = 396$  v20 -> 118(‘v’) \* 20 = 2360$  b50 -> 98(‘b’) \* 50 = 4900$ |
| **Input** | **Output** | |
| c2 v1 b2 v2 c20 b150 v1  Van with 50 seats  Van with 1 seats  Bus with 1000 seats  End of customers! | No  Yes, sold for 118$  No  Vehicles left: c2, b2, v2, c20, b150, v1  Vehicles sold: 1 | |