

Easter Bonus

Problem for exam preparation for the [Programming Fundamentals Course @SoftUni](#).

Submit your solutions in the SoftUni judge system at <https://judge.softuni.org/Contests/Practice/Index/1773#2>.

Susi is working in an IT company and she is responsible for organising the salaries and also the Easter bonuses for every employee. Her team leader wants her to create a program which manages the easter bonuses to a given employee's salary. Thus the program should work with a list of employee names and the respective commands, which are given by her team leader.

Create such a **managing program** and help Susi to please her team leader.

On the first line you will be given a **list of names** separated by " \$\$ ". Then you should **calculate the salary and bonus** for every employee in the list (**save both of them**, because you will need them later).

The **salary** is respectively the **length of the employee's name divided by 2 and then multiplied by 1000**. The **bonus** should be **firstly set to 0**, because **NOT EVERY** employee will get a bonus this Easter. (**Not every employee's bonus/salary will be changed**)

On the next lines you will receive **different kinds** of commands **to manage the salary and bonus** of the given employee **until** you get the command **"Easter"**. The following lines represent these types of commands:

- **"Add {name_1}, {name_2}, ... {name_n}":**
 - adds new employees who are **not there yet** and **prints** the newly added employee with the corresponding salary and bonus: **"{name} is newly added to the system with a salary of {salary amount}!"**
 - if the name already **exists**, add **100** to the salary and **10** to the bonus
- **"Bonus {name} {bonus amount}":**
 - increases the bonus of an employee with the **given name** by the given amount of bonus, if **there isn't** any employee with the given name **print: "No such employee was found!"**
- **"Charge bonus {name}":**
 - **decrements** the bonus of the employee with the given name **by 101**
 - if the bonus gets **lower than 0**, **set it to 0**
 - also if there is **no such user**, **ignore** the command
- **"Show {bonus amount}":**
 - **prints** all of the employees, who have **more than** the given bonus: **"{name_1}, {name_2}, ... {name_n}"**
 - if **there isn't** any, **print: "No employees with a bonus higher than {bonus amount}!"**

At the **end**, **sort** the **names** in **alphabetical order** and then **print** the employees, whose **bonus is more than 0**. The **salary and bonus** should be formatted to the **second decimal place**. Print the employees in the following format:

Best employees this Easter:

```
-> {Employee_name_1} with salary {salary_amount} and additional Easter bonus
{bonus_amount}
-> {Employee_name_2} with salary {salary_amount} and additional Easter bonus
{bonus_amount}
-> {Employee_name_3} with salary {salary_amount} and additional Easter bonus
{bonus_amount}

.

.

.

-> {Employee_name_n} with salary {salary_amount} and additional Easter bonus
{bonus_amounts}
```

Input

- On the **1st line**, you are going to receive the **list** of employee names (**Strings** separated by ' '\$\$ ')
- On the following **lines**, until "**Easter**", you will be receiving commands.

Output

- **Print** the employees in the **format described above**.

Constraints

- You will be given **only unique names** for the employees
- **By adding** new employees, you should **set the bonus to 0**
- Be cautious with **white spaces** by separating the **names of the employees** from the **first input line**
- Be cautious with **white space** in the **final printing** of all employees
- All commands will be **valid**
- There will be **at least one employee** with **more than 0 bonus** (for end listing)



Examples

| Input | Output |
|--|---|
| Georgi \$\$ Peter \$\$ Hristo \$\$ Koicho \$\$ Alper Show 50 Bonus Hristo 300 Bonus Aishe 20 Add Aishe, Bilqna Easter | No employees with a bonus higher than 50.00! No such employee was found! Aishe is newly added to the system with a salary of 2500.00! Bilqna is newly added to the system with a salary of 3000.00! Best employees this Easter: -> Hristo with salary 3000.00 and additional Easter bonus 300.00 |
| Input | Output |
| Teodor \$\$ Pavlin \$\$ Svetlin \$\$ Tatqna \$\$ Kristiqna \$\$ Pepa Bonus Pavlin 70 Bonus Tatqna 400 Bonus Teodor 30 Bonus Svetlin 800 Add Pavlin, Pepa Easter | Best employees this Easter: -> Pavlin with salary 3100.00 and additional Easter bonus 80.00 -> Pepa with salary 2100.00 and additional Easter bonus 10.00 -> Svetlin with salary 3500.00 and additional Easter bonus 800.00 -> Tatqna with salary 3000.00 and additional Easter bonus 400.00 -> Teodor with salary 3000.00 and additional Easter bonus 30.00 |

| Input | Output |
|--|---|
| <p>Spas \$\$ Naum \$\$ Kiril \$\$ Petko</p> <p>Bonus Naum 1000</p> <p>Bonus Iliqna 30</p> <p>Charge bonus Naum</p> <p>Charge bonus Naum</p> <p>Charge bonus Krisko</p> <p>Bonus Petko 405</p> <p>Show 20</p> <p>Add Iliqna, Kris, Naum</p> <p>Easter</p> | <p>No such employee was found!</p> <p>Petko, Naum</p> <p>Iliqna is newly added to the system with a salary of 3000.00!</p> <p>Kris is newly added to the system with a salary of 2000.00!</p> <p>Best employees this Easter:</p> <p style="padding-left: 40px;">-> Naum with salary 2100.00 and additional Easter bonus 808.00</p> <p style="padding-left: 40px;">-> Petko with salary 2500.00 and additional Easter bonus 405.00</p> |
| Input | Output |
| <p>Qna \$\$ Krum \$\$ Eshkobeshko \$\$ Traqna</p> <p>Add Radoikata, Ralica, Simoteka</p> <p>Show 10</p> <p>Bonus Ralica 100</p> <p>Bonus Simoteka 60</p> <p>Bonus Krum 900</p> <p>Bonus Qna 90</p> <p>Bonus Traqna 320</p> <p>Show 100</p> <p>Charge bonus Traqna</p> <p>Charge bonus Ralica</p> <p>Easter</p> | <p>Radoikata is newly added to the system with a salary of 4500.00!</p> <p>Ralica is newly added to the system with a salary of 3000.00!</p> <p>Simoteka is newly added to the system with a salary of 4000.00!</p> <p>No employees with a bonus higher than 10.00!</p> <p>Traqna, Krum</p> <p>Best employees this Easter:</p> <p style="padding-left: 40px;">-> Krum with salary 2000.00 and additional Easter bonus 900.00</p> <p style="padding-left: 40px;">-> Qna with salary 1500.00 and additional Easter bonus 90.00</p> <p style="padding-left: 40px;">-> Simoteka with salary 4000.00 and additional Easter bonus 60.00</p> <p style="padding-left: 40px;">-> Traqna with salary 3000.00 and additional Easter bonus 219.00</p> |

