

---

## Queues of a supermarket (2)

P83396\_en

---

Simulate the behavior of the queues of a supermarket. Initially, there are  $n$  queues  $(1, 2, \dots, n)$ , each one with some customers. Afterwards, two events can happen:

- A customer arrives to a queue: If the queue is between 1 and  $n$ , the customer goes to the end of that queue. Otherwise, the event is ignored.
- A customer leaves a queue: If the queue is between 1 and  $n$ , and that queue is not empty, the oldest customer of that queue leaves it. Otherwise, the event is ignored.

### Input

Input starts with the number of queues  $n$  (a strictly positive natural number). Follow  $n$  lines, one per queue, each one with its customers (a word) and their ages (a real number). Follow an empty line and the description of several events, one per line: the word "ENTERS" followed by the customer, the customer's age, and the queue; or the word "LEAVES" followed by the queue. All the customers have different ages.

### Output

First, print the name of the customers that leave the queues, in the order that they departed. Afterwards, print the final content of the  $n$  queues, using the order in which the customers would leave. Follow the format of the example.

#### Sample input

```
4
Cristina 10 Tomas 27
Francesc 70 Damia 25.5 Domenec 80

Teresa 19 Toni 83 Carles 24

LEAVES 1
LEAVES 1
ENTERS Amalia 30 4
LEAVES 2
LEAVES 1
ENTERS Leo 22 1
ENTERS Maria 20 3
LEAVES 4
LEAVES 4
LEAVES 3
ENTERS Carme 18 4
LEAVES 2
LEAVES -1
LEAVES 2
```

#### Sample output

```
DEPARTS
-----
Tomas
Cristina
Domenec
Toni
Amalia
Maria
Francesc
Damia

FINAL CONTENTS
-----
queue 1: Leo
queue 2:
queue 3:
queue 4: Carles Teresa Carme
```

### Problem information

Author : Salvador Roura

Translator : Carlos Molina

Generation : 2018-08-28 21:05:42

© *Jutge.org*, 2006–2018.  
<https://jutge.org>