

## COSC 121 – Assignment #2

### Task:

Ken's office hours are getting really full, and a long line is forming outside his office each time. The students decide that they are too smart to simply line up, and decide on implementing a system.

The system is a queue, but with some weird exceptions. When a student joins the back of the line, if they are younger or if their grade is lower than the person in front of them they can move up 1 spot, but only 1 spot.

### Input

If a student is joining the line, the input format is the student's first name then a space then their age, then a space, then their grade.

When Ken helps the next student in line, removing them from the queue, the input is *next*.

When the input is done, the input is *end*.

### Output

The output will be the order of the students currently in line.

If the queue is empty, output the word *empty*.

### Example Input

```
Taylor 23 98
Christian 17 100
Brett 65 87
Bryce 21 86
next
Shane 32 99
Tasha 22 95
end
```

### Example Output

```
Brett 65 87
Bryce 21 86
Taylor 23 98
Tasha 22 95
Shane 32 99
```

### Submission

1. Test and submit your Java code on:

<https://www.hackerrank.com/lab2-1579133334>

2. Submit your source code files (the files with extension .java) on the Moodle Lab 2 folder.