

AKQA Coding Test

Your employer has an existing system for employees to submit booking requests for meetings in the boardroom. Your employer has now asked you to implement a system for processing batches of booking requests.

Input

Your processing system must process input as text. The first line of the input text represents the company office hours, in 24 hour clock format, and the remainder of the input represents individual booking requests. Each booking request is in the following format.

[request submission time, in the format YYYY-MM-DD HH:MM:SS] [ARCH:employee id]
[meeting start time, in the format YYYY-MM-DD HH:MM] [ARCH:meeting duration in hours]

A sample text input follows, to be used in your solution.

Input

```
0900 1730
2011-03-17 10:17:06 EMP001
2011-03-21 09:00 2
2011-03-16 12:34:56 EMP002
2011-03-21 09:00 2
2011-03-16 09:28:23 EMP003
2011-03-22 14:00 2
2011-03-17 11:23:45 EMP004
2011-03-22 16:00 1
2011-03-15 17:29:12 EMP005
2011-03-21 16:00 3
```

Output

Your system must provide a successful booking calendar as output, with bookings being grouped chronologically by day. For the sample input displayed above, your system must provide the following output.

Output

```
2011-03-21
09:00 11:00 EMP002
2011-03-22
14:00 16:00 EMP003
16:00 17:00 EMP004
```

Constraints

- No part of a meeting may fall outside office hours.
- Meetings may not overlap.
- The booking submission system only allows one submission at a time, so submission times are guaranteed to be unique.
- Bookings must be processed in the chronological order in which they were submitted.
- The ordering of booking submissions in the supplied input is not guaranteed.

Notes

- The current requirements make no provision for alerting users of failed bookings; it is up to the user to confirm that their booking was successful.
- Although the system that you produce may open and parse a text file for input, this is not part of the requirements. As long as the input text is in the correct format, the method of input is up to the developer.
- We're aware that there are solutions to this test on the internet, posted by previous unsuccessful applicants. If we find that you have copied your solution, you will not be considered for interview.