

Problem 19 – Chat Logger

Write a program that receives **several messages** and **the current date**, sorts those messages **by date** and prints **the time from the last message to the current date**.

The messages will be in format **[message] / [date]**, where **date** is in format **dd-mm-YYYY hours:min:secs**. The messages should be **sorted by date** and their text should be printed in **<div></div>** tags on a separate line. For example we are given the current date **12-08-2014 10:14:23** and the following messages:

```
Thanks :) / 11-08-2014 22:54:52
Hey John, happy birthday! / 10-08-2014 00:00:00
```

After sorting the messages by date in **ascending** order (from **oldest to most recent**), the result is:

```
<div>Hey John, happy birthday!</div>
<div>Thanks :)</div>
```

Finally, the time since the most recent message should be printed in the following way:

- **a few moments ago** if it was less than 1 minute ago
- **[full minutes] minute(s) ago** if it was less than 1 hour ago
- **[full hours] hour(s) ago** if it was less than 24 hours ago **on the same day**
- **yesterday** if it was the previous date, regardless of the time difference
- **[date]** if it was earlier than yesterday, where **date** is in format **dd-mm-YYYY**

The resulting timestamp should be printed as follows: **<p>Last active: <time>[timestamp]</time></p>**. In this case, the difference between the current date and the last message is 11 full hours, but since the message's day is 1 day before the current day, we print yesterday:

```
<p>Last active: <time>yesterday</time></p>
```

Input

The input will be read from the console. The **current time** will be received on the first line. The **messages** come will be received on the next input lines, **each message on a separate line**. The input ends with the command **"END"**.

Output

Each message should be printed in its own **<div></div>** tags, on a separate line. On the final line, the difference between the current date and the last message date should be printed in the format described above. Ensure the HTML special characters are correctly encoded (use **SecurityElement.Escape**).

Constraints

- All input dates will be in format **dd-mm-YYYY hours:min:secs**.
- The received messages will always be in format **[message] / [date]** (with space around the delimiter '/').
- There will be exactly one message on a single line.
- There will be no messages with the same date.
- The current date will always be after any message's date.

Examples

Input	Output
12-08-2014 10:14:23 Thanks :) / 11-08-2014 22:54:52 Hey John, happy birthday! / 10-08-2014 00:00:00 END	<div>Hey John, happy birthday!</div> <div>Thanks :)</div> <p>Last active: <time>yesterday</time></p>

Input	Output
29-08-2014 15:33:11 Kaji na mama che q obicham / 29-08-2014 15:32:23 Zdravey, kak mina izpita? / 29-08-2014 15:30:32 Brat sgashtiha me da prepisvam i me karat v raionnoto.. / 29-08-2014 15:30:58 END	<div>Zdravey, kak mina izpita?</div> <div>Brat sgashtiha me da prepisvam i me karat v raionnoto..</div> <div>Kaji na mama che q obicham</div> <p>Last active: <time>a few moments ago</time></p>

Input	Output
29-08-2014 17:33:11 Wanna grab some snacks? / 24-08-2014 16:33:12 Sure, be right there in a minute! / 25-08-2014 22:06:13 END	<div>Wanna grab some snacks?</div> <div>Sure, be right there in a minute!</div> <p>Last active: <time>25-08-2014</time></p>