Temperature sensors

A sensor network measure the air temperature in a room. The sensors are arranged in a $N \times N$ square grid. Each sensor is identified by its coordinates (x, y) in the grid, with $x, y \in \{0, 1, \ldots, N-1\}$. Each sensor measures the temperature with an unknown frequency. All measurements are saved in a file "*sensors.txt*", one reading per line, with format

```
<time> <x> <y> <temp>
```

where `<time>` is a string with format `hh:mm:ss` representing the reading timestamp, `<x>` and `<y>` are the x and y coordinates of the sensor, and `<temp>` is a real value representing the temperature in Celsius degrees. The 4 values are separated by spaces. The file contains the data of a single day in chronological order. Each sensor has performed at least one reading.

Write a program to process the file *sensors.txt*, printing, for each sensor, the average temperature with a precision of one decimal digit (the order is not important). The program must also print the coordinates of the sensor that measured the highest temperature (only one in case of multiple maxima), and the corresponding time.

Example

Given the file *sensors.txt*

```
01:10:00 1 1 7.1
01:10:02 0 1 7.2
01:10:03 1 1 8.1
01:10:05 0 0 7.3
01:10:15 1 0 7.4
01:10:18 1 0 7.6
```

the program should print

```
(0, 0) 7.3
(0, 1) 7.2
(1, 0) 7.5
(1, 1) 7.6
```

```
Maximum value was measured by sensor (1, 1) at 01:10:03
```