PYRAMIDS

During a trip to Val Vermenagna, Prof Otto Lidenbrock discovered a surprising complex of buildings pyramids made up of cubes of one meter on each side. Each structure has the highest point in the center, surrounded by a second lower than one meter and wider than one meter in each direction, followed by countless successive levels that they degrade either to the ground, or to meet the side of another pyramid, or to the rocky walls that delimit the area. Given the high regularity of the area, Prof. Lindenbrock divided the area into a grid of squares one meter wide. After that, considering the ground at height 0, he wrote down a representative table in a file all heights (whole numbers). Note that a peak must have a height greater than 0 and can be recognized by the absence of adjacent higher points. Also note that each bud has no directly adjacent peaks, not even in diagonal.

It is required to write a program capable of acquiring the file written by the Professor, whose name is `map.txt`. The program will have to print the list of tops on the screen, following the following format. Number the rows and columns starting from 0. It is assumed that the contents of the file are correct and conform to the description. If there are no tops, report it.

```
height column row
height column row
```

At the end, print the average height of the tops.

Example

map.txt

```
3 4 4 4 3 2 1 0 0 0
3 4 5 4 3 2 1 1 1 1
3 4 4 4 3 2 2 2 2 1
3 3 3 3 3 3 3 3 2 1
2 2 2 2 2 3 4 3 2 1
1 1 1 1 2 3 3 3 2 1
0 0 0 1 2 2 2 2 2 1
0 0 0 1 1 1 1 1 1 1
0 1 0 0 0 0 0 0 0 0
0 0 0 0 0 0 1 0 0 0
```

Output

```
5 1 2
4 4 6
1 8 1
1 9 6

Average height: 2.75 m
```