Level 4

Catalysts
event organizer

Task for level 4:

Find the corresponding asteroid occurrences.

All assumptions are like in Level 3 apart from the image order and the possibility of repeated views.

In this level:

› For each asteroid you have several images, each one showing either the front or the back view of an asteroid.
› There is at least one front and one back image for each asteroid.

For each asteroid, output the timestamp of its first occurrence alongside with its volume

Input format: The same as in Level 3

- › `timestamps` are unique
- › The images are ordered by their timestamps
- › There is at least one front and one back side view for each asteroid.
- › There might be more than one front/back views from the same asteroid.
- › The distance from the asteroid to the imaging plane may vary between several views.
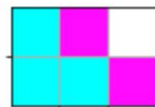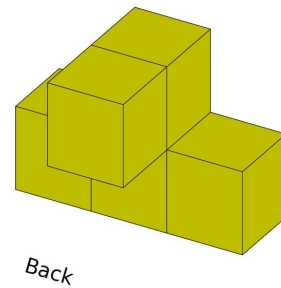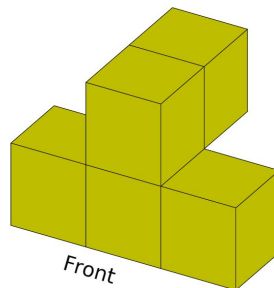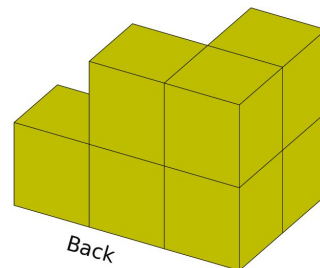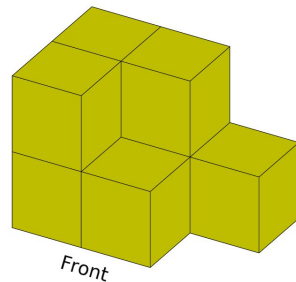
Output format: The same as in Level 3

- › The `resultlines` must be ordered by `timestamp`

Sample input:
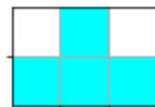5
14 2 3
2 3 0
2 2 3
18 2 3
0 19 0
19 19 19
19 2 3
4 5 0
4 4 5
23 2 3
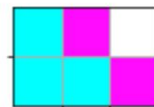0 29 29
29 29 29
32 2 3
0 9 0
10 10 10

Sample output:
14 8
18 5

Front

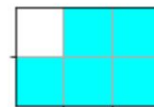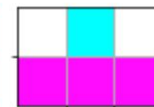Back

Front

Back

t=14   t=18   t=19   t=23   t=32