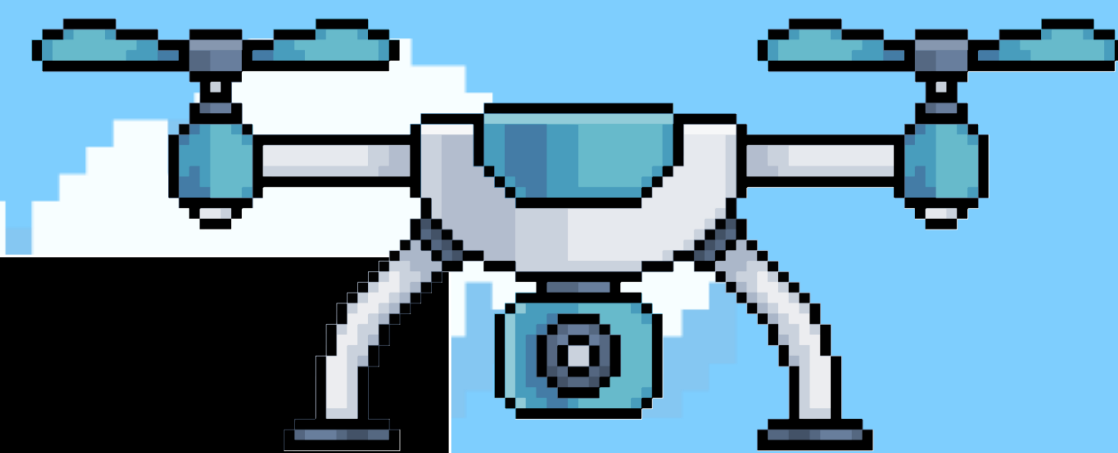


LEVEL 5





Now you can detect the position of a single animal.
That's great but of course there are usually more animals out in your fields.
In this level all the images contain 5 animals. Can you still get their positions?

Hint:

Depending on your approach in the previous level, predicting the positions of 5 animals can be much harder. Not all problems need to be solved with machine learning. Can you find something that all animals have in common?
Look closely ;-)





Input

Test data

- 1000 pairs of cloudy Images
 - All images contain 5 animals

```
1 38,63,45,98,89,113,144,151,98,165
2 130,22,134,80,155,106,122,130,49,175
3 135,20,179,65,140,108,63,113,30,122
4 77,36,30,67,66,69,64,113,169,149
```

Output

A file with your predictions.

Every row contains 5 x,y tuples. The x,y are the coordinates of every animal.

The ordering of the predictions within one row is not relevant.

Metric:

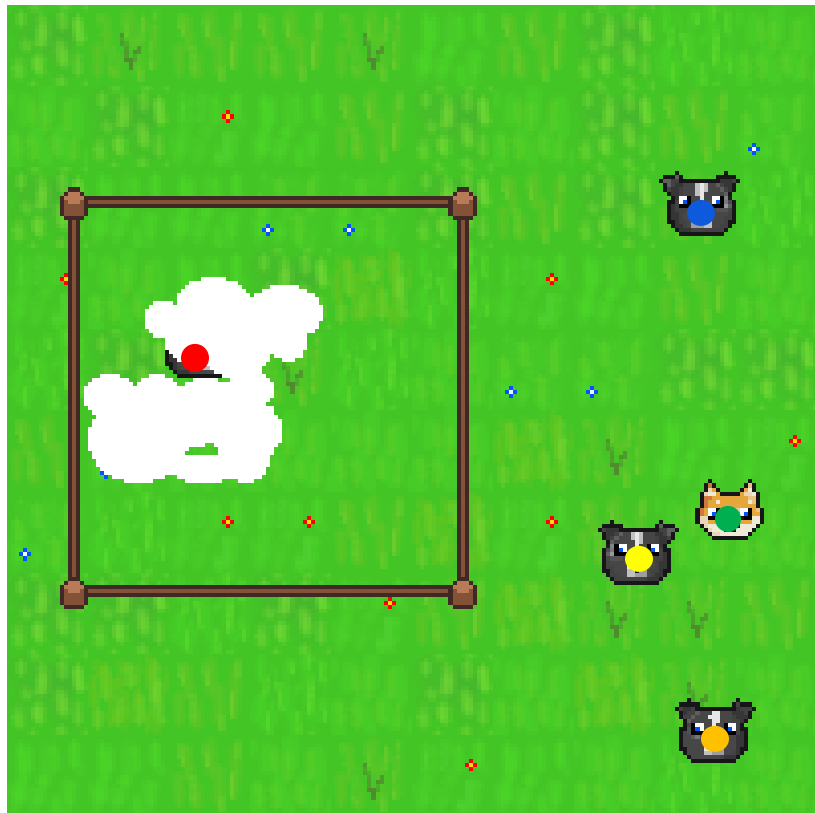
Mean Chamfer Distance (Calculates the squared distance between your points and the closest point from the solution and vice versa).

Your predictions must have a Mean Chamfer Distance ≤ 20 .

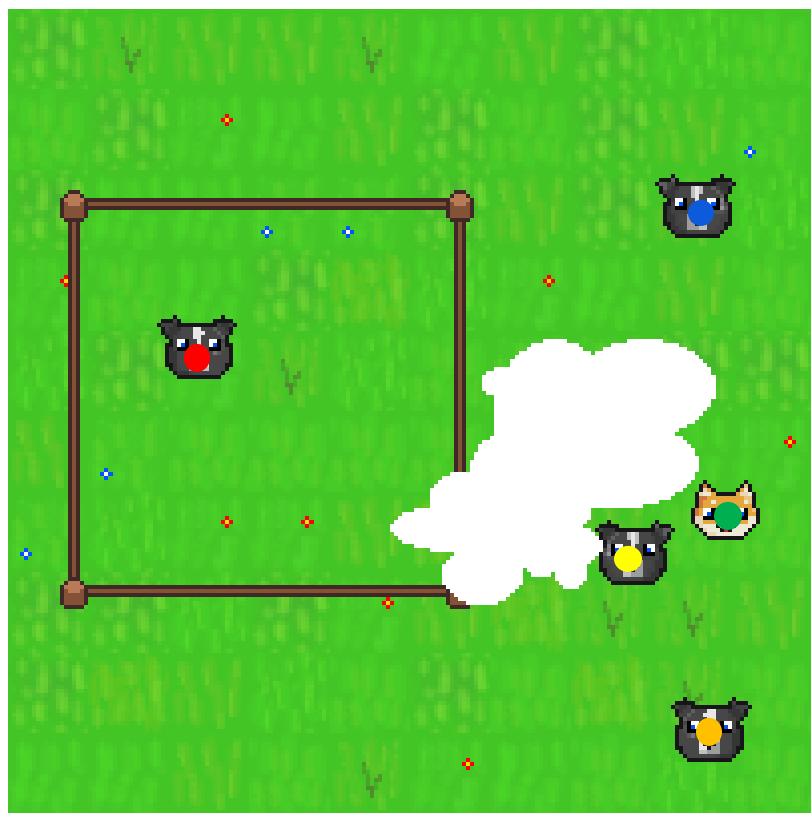


Example Input

Field000_sample0.png



Field000_sample1.png



Example Output

47,84,171,49,179,125,156,135,175,179

Explanation:

- The red numbers are the coordinates of the red dot, the blue ones for the blue dot and so on

