



# Level 3

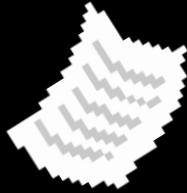


## Level 3: The Hurracurra Bird

Now we have a full list of Bird Observation Points.  
Great job!

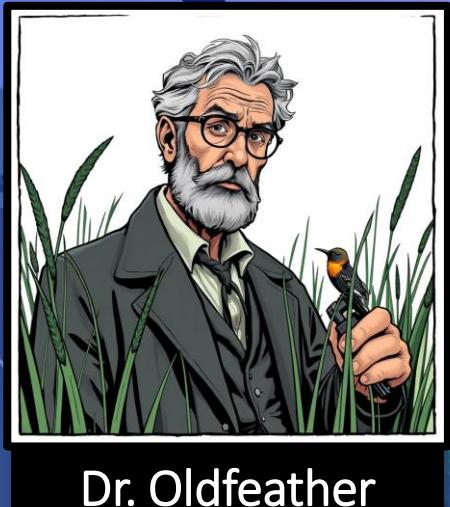
Your next step is to analyze the movement of some bird flocks and to categorize their species.

You called some ornithologists to describe their favorite bird species. You collected the phone calls with your speech-to-text software. Here are the records ..



continue



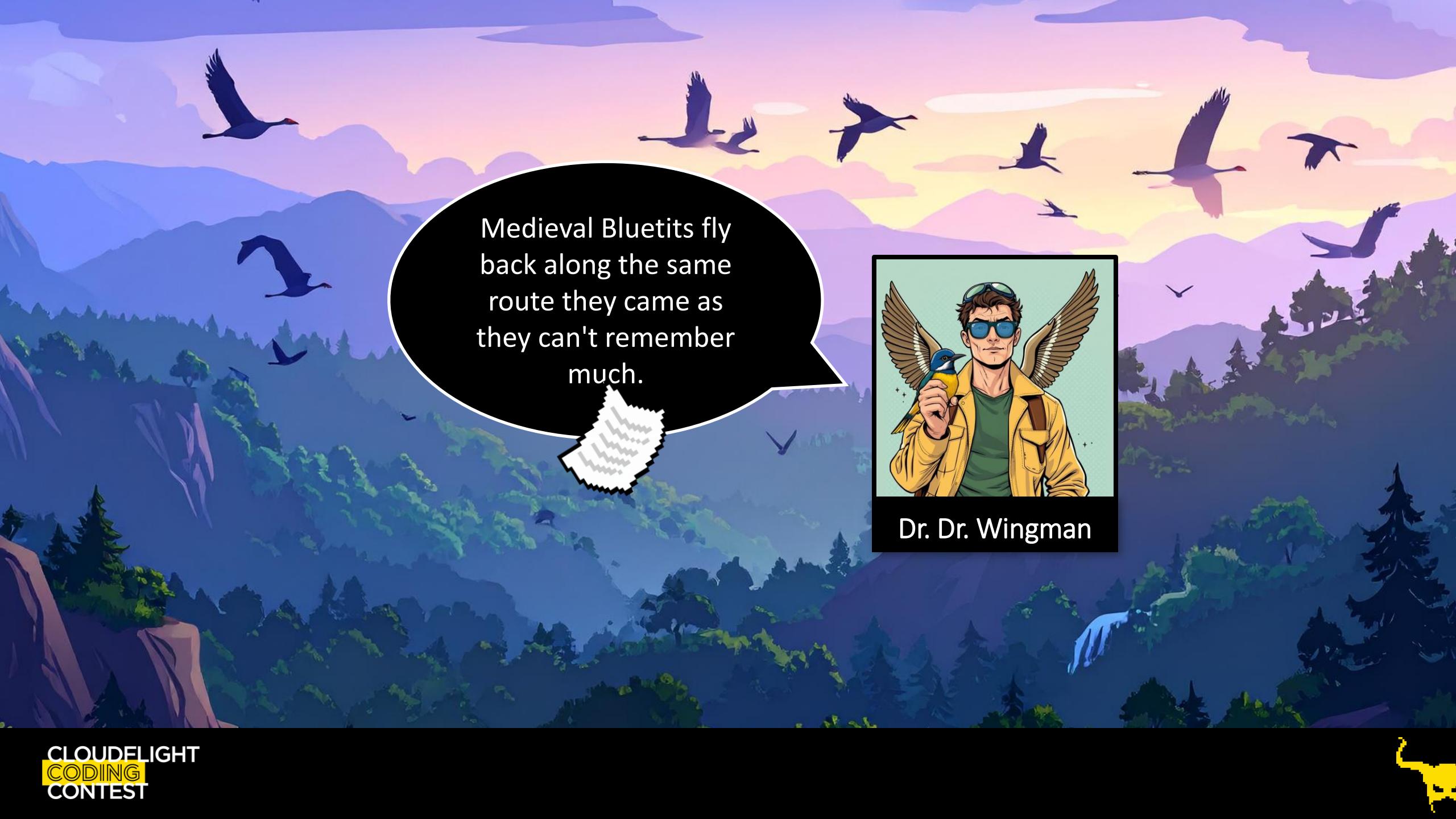


Dr. Oldfeather

My lovely species "Huracurra Bird", it is the most awesome species, prefers to eat the "Huracurra Worm".

Those worms can only be found in hot regions. I love those worms because they grow up to a length of 60 centimeters. Incredible! And the worm don't have eyes, but they can sense light, vibrations, and chemicals in their environment, helping them avoid danger and find food. Ah.. What was the question?





Medieval Bluetits fly back along the same route they came as they can't remember much.



Dr. Dr. Wingman





Dr. Beak Geek

Ah.. Yes.. The Flanking Blackfinch..  
Like the Earth around the sun,  
flocks of these special birds orbit a  
chosen land. They always try to  
stay together because they are  
crazy about each other!



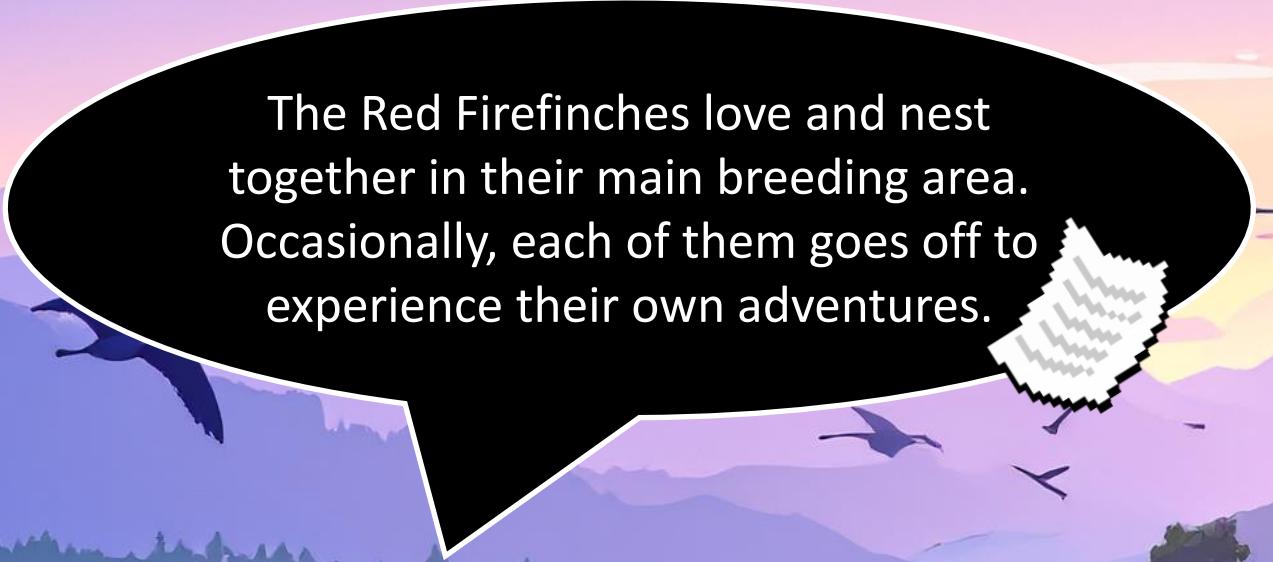


After spending a wonderful journey together, the Rusty Goldhammers feel a need for some "me-time" and split up for their way back.



Eggsplorer  
Extraordinaire





The Red Firefinches love and nest together in their main breeding area. Occasionally, each of them goes off to experience their own adventures.



Tweet Investigator





Sir Chirp Alot

The Sticky Wolfthroats are birds of prey and eat the Medieval Bluetits because their routes are easy to predict. They operate in independent groups and lie in wait along several segments of the Bluetits' routes.



## Level 3: The Huracurra Bird

- Some birds are chipped, and BOPs can recognize if they are close
- You have records of BOP travelling paths of individual birds (rows)
- Each bird belongs to exactly one of 6 flocks
- Each flock is one of the 6 species

CSV Sample (included in level\_3.zip):

```
Flock ID, BOP Path  
1, 1 2 3 4 5 6 7 6 5 4 3 2 1  
2, 1 2 5 4 1
```

note: The spaces after commas in this csv sample are just for readability, they are not in real \*.in files

- Each of the 6 species is represented by exactly one flock in each dataset (e.g. "level\_3\_a.in" contains all 6 species and exactly 6 flocks)
- You might reuse temperature data from level 1 (included in level\_3.zip, but beware of the °F-bug)

continue

## Level 3: Acceptance Criteria

For this level to succeed, you have to find out, which flock ID represents which species.

Species names (included in level\_3.zip):

```
Huracurra Bird  
Medieval Bluetit  
Flanking Blackfinch  
Rusty Goldhammer  
Red Firefinch  
Sticky Wolfthroat
```

Submission sample (included in level\_3.zip):

```
Flock ID,Species  
1,Medieval Bluetit ← your guess for Flock ID 1  
2,Sticky Wolfthroat← your guess for Flock ID 2
```

That's it – good luck!



submit