## **Image classification**

## 1. Description

By following the procedure describe in <a href="https://www.tensorflow.org/tutorials/images/classification">https://www.tensorflow.org/tutorials/images/classification</a>, I will create a model that will give back the class that the image corresponds to. I will be classifying bird species.

2. Dataset: <a href="https://www.kaggle.com/datasets/gpiosenka/100-bird-species">https://www.kaggle.com/datasets/gpiosenka/100-bird-species</a>
This dataset has around 500 bird species. Since using such a big dataset will take a lot of time to train, I will concentrate on 11 bird species that has around 200 images for each.

## 3. Methodology:

3.a: To process the data, I will increase the number of images using cv2 functions.

3.b: I will be using the Sequential model in keras that is a Convolutional Neural Network model.

3.c: I will be using the accuracy metric defined in keras model.

## 4. Application:

I wanted to create a webapp such that the user will provide an image of bird and the program will give back the species of the bird. However, because of the deadline and my lack of knowledge in html and javascript, I will not be able to create the webapp