**DEEP LEARNING**

**PRACTICAL 6**

**SAURABH AGARWAL**

**J001**

**B.Tech Data Science**

**3rd year**

**J1 BATCH**

**Aim :-**

How to get images from Image net.

Observations :-

The URLs used are –

1. http://www.image-net.org/api/text/imagenet.synset.geturls?wnid= 2. http://www.image-net.org/api/text/imagenet.synset.geturls?wnid=n04194289%22

The images from the site are downloaded. 2 directories are created to store these images. The images used are of cats and dogs. After the images are saved in the folder, a dataframe is created. Similar dataframe is created for test. The images are passed through a generator function for both train and validation sets. A Sequential model is created with 6 layers. The 6 layers are conv2D, flatten, dense, relu, dense,sigmoid. The model is then evaluated and a roc\_auc\_score is generated. The output is predicted.

AUC validation score is 0.5.

The link of the colab sheet is given below :-

https://colab.research.google.com/drive/1vSgqqqiIHrOGabLxwD0Cr83BOaK1THjZ#forceEdit=true&s andboxMode=true&scrollTo=4LtZJ6sPGzQM

**Conclusion** :-

39 observations have been correctly predicted by the model. On the other hand 34 observations have been misclassified.