## **DEEP LEARNING PRACTICAL 6**

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 $\underline{\textbf{Code:-}} \quad \text{https://github.com/visheshtechie/DL/blob/master/Lab6\_Data\_augmentation\_flow\_dataframe\_J018.ipynb}$ 

## Aim:-

How to get images from Image net.

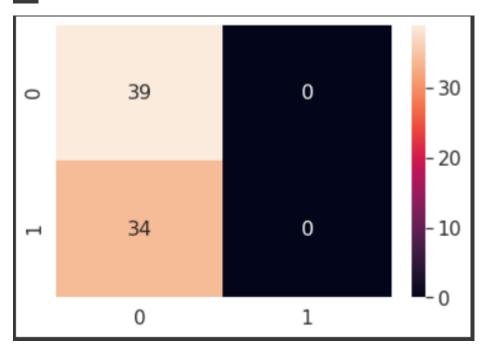
Observations:-

The URLs used are -

- 1. <a href="http://www.image-net.org/api/text/imagenet.synset.geturls?wnid="http://www.image-net.org/api/text/imagenet.synset.geturls?wnid="http://www.image-net.org/api/text/imagenet.synset.geturls?wnid="http://www.image-net.org/api/text/imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.synset.geturls?wnid="http://www.imagenet.geturls
- 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.





## Conclusion:-

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