* **Loading data, EDA, Imagedatagenerator, Data Augmentation**

1. First of all I have used Kaggle notebook for the project and I have downloaded data from the drive and uploaded it to Kaggle notebook as private
2. Now I have imported necessary libraries
3. Now I have created a training data frame and done EDA on it
4. Now I have created a function that is going to add ‘.jpg’ at the end of every ‘image\_name’ in training and testing data frame
5. Now I have shown some images to check for pixels of images (and found out 250x250 as best pixels)
6. Now I have created ImageDataGenerator for training, validation, and testing and also applied data augmentation
7. Now I have shown some images with their label

* **Creating model without using pre-trained base**

1. Now I have created a model without using a pre-trained base or transfer learning
2. Now I have used a model checking point from Keras for saving the best weights so that we don’t have to fit our model every time for the number of epochs
3. Now I have fitted the model with training and validation data for 40 epochs and also used callback for apply model checkpoint during training
4. Now I have plotted graphs of accuracy and loss for the number of epochs
5. Now I have evaluated my model for training and testing data using the trained model
6. Now I have evaluated the model for training and testing data with a saved model that is saved by model checking point with best weights and also checked the shape of prediction for testing data

# Creating model with pretrained base

1. Now I have created a function that takes pretrained base as its parameter and creates the model
2. Now I have used different pretrained bases

* **Steps for applying transfer learning to model (same steps for all pretrained bases)**

1. First of all I have created a pre-trained base object from Keras. applications and used hyperparameters compatible with our data
2. Now I have given this object to created function as parameters and it will return compiled model
3. Now I have shown the summary of the model that is gonna show how many parameters are there and how many trainable parameters
4. Now I have created a model checkpoint object to give during the fitting of data
5. Now after fitting the data I have shown Accuracy, Loss vs number of epochs graphs
6. Now I have evaluated the model for both training and testing data
7. Now I have also evaluated for both training and testing data using saved model and also checked the shape of test prediction data