A picture containing text, clipart

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**IHC – Vision Intelligence and Machine Learning**

**Industry Assignment No. 3**

**Problem Statement**

A leading AI firm needs to build a vision model to distinguish between cats and dogs, as a data scientist you are required to build a model that can predict the same.

**Data Set**

Data set is embedded in your workbook and will be auto downloaded.

**What is expected**

Create a model that can distinguish between a cat and a dog. Since this is a vision intelligence exercise, besides creating a normal CNN model, you are also expected to use IMAGE AUGMENTATION techniques like image rotation, resizing, zooming, shearing, flipping etc.

**Rubrics**

1. Data pre-processing into various directory using a defined function.
2. Using Image generator to feed data to the model.
3. Using augmentation techniques like image rotation, resizing, zooming, shearing, flipping etc with optimal values.
4. Constructing an optimal model that isn’t too heavy but also not too lite.
5. Extra marks for using transfer learning.

Students are also given a logical flow at the beginning of the workbook that can act as a skeleton to the overall project, but they are advised to add further steps where they feel necessary based on the rubrics defined above for maximum marks.