**Test Assignment for Data Science Intern**

**Happymonk Technology – SADHVI ANUNAYA R**

**PROBLEM STATEMENT:**

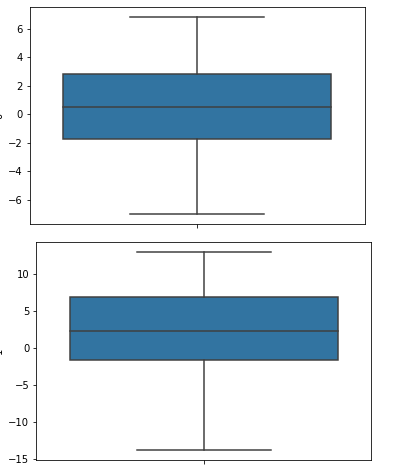
The purpose of the task is to classify the target variable accurately. Using neural network the classification model should be built. The neural network must consist of 1-hidden layer that adapts to the best activation function for the bank note dataset.

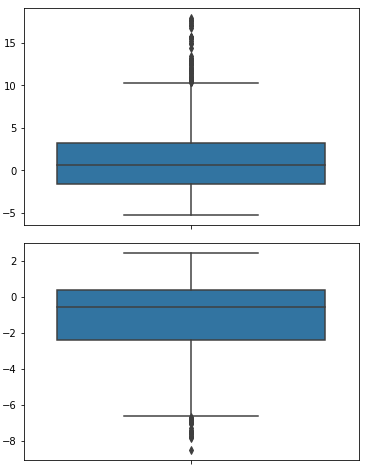
**DATA SET:**

The dataset used is data\_banknote. It contains 1372 instances in the data set , and the number of variables is 5.

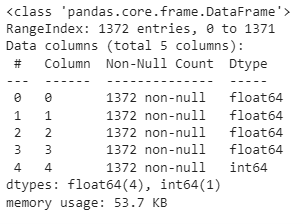
**VISUALIZATION:**

*Boxplot Distributions*

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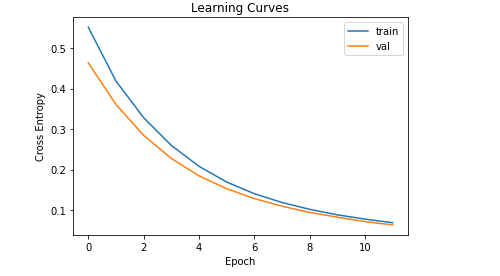
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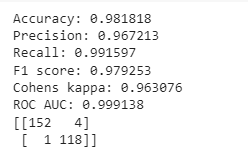
**Dataset:**

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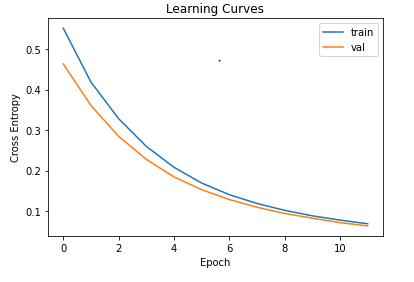
**IMPLEMENTATION:**

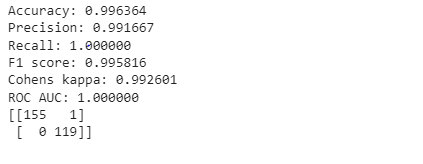
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**With 12 epochs the accuracy is more over the data.**

**Conclusion:**

When the epoch value is increased there is an increase in the accuracy of the data.