Neural Networks & Deep Learning: ICP1

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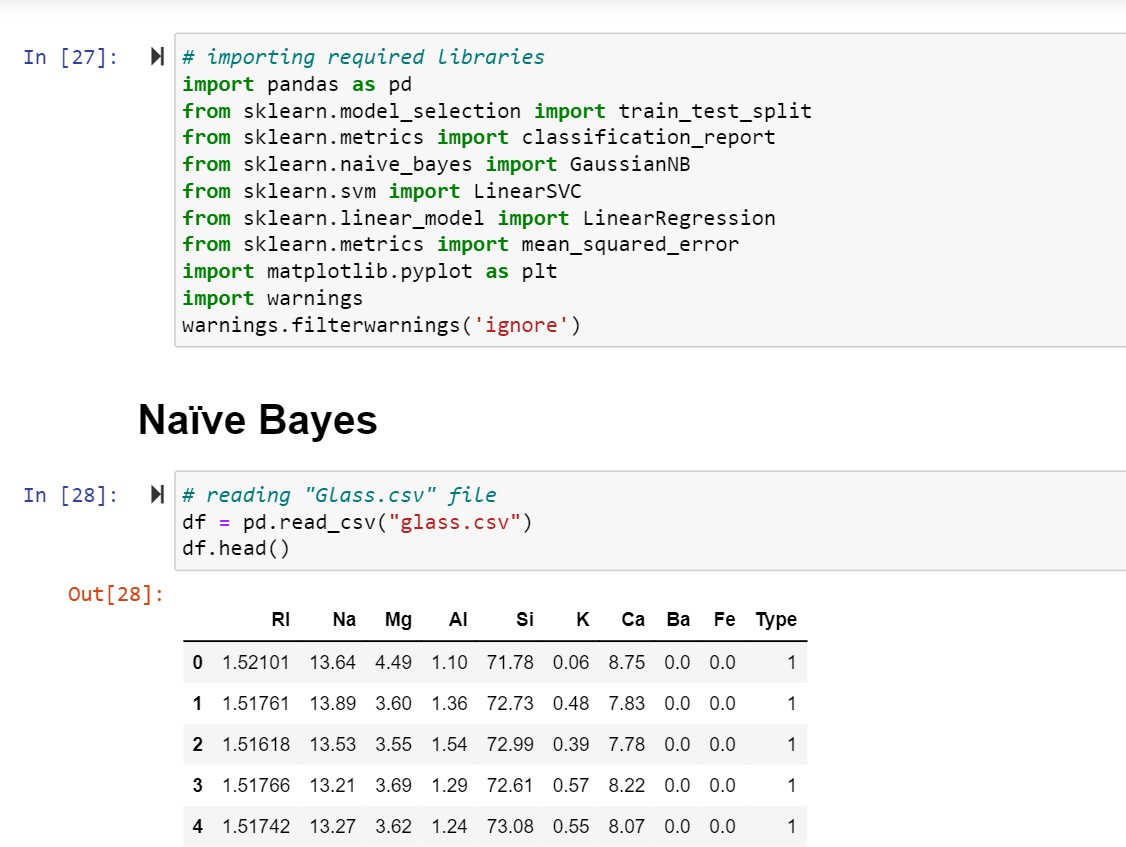
**Video Link:**

[**https://drive.google.com/file/d/1RIT\_t0YiIiKOsqAhnO5W3P6ODyYqBCLE/view?usp=sharing**](https://drive.google.com/file/d/1RIT_t0YiIiKOsqAhnO5W3P6ODyYqBCLE/view?usp=sharing)

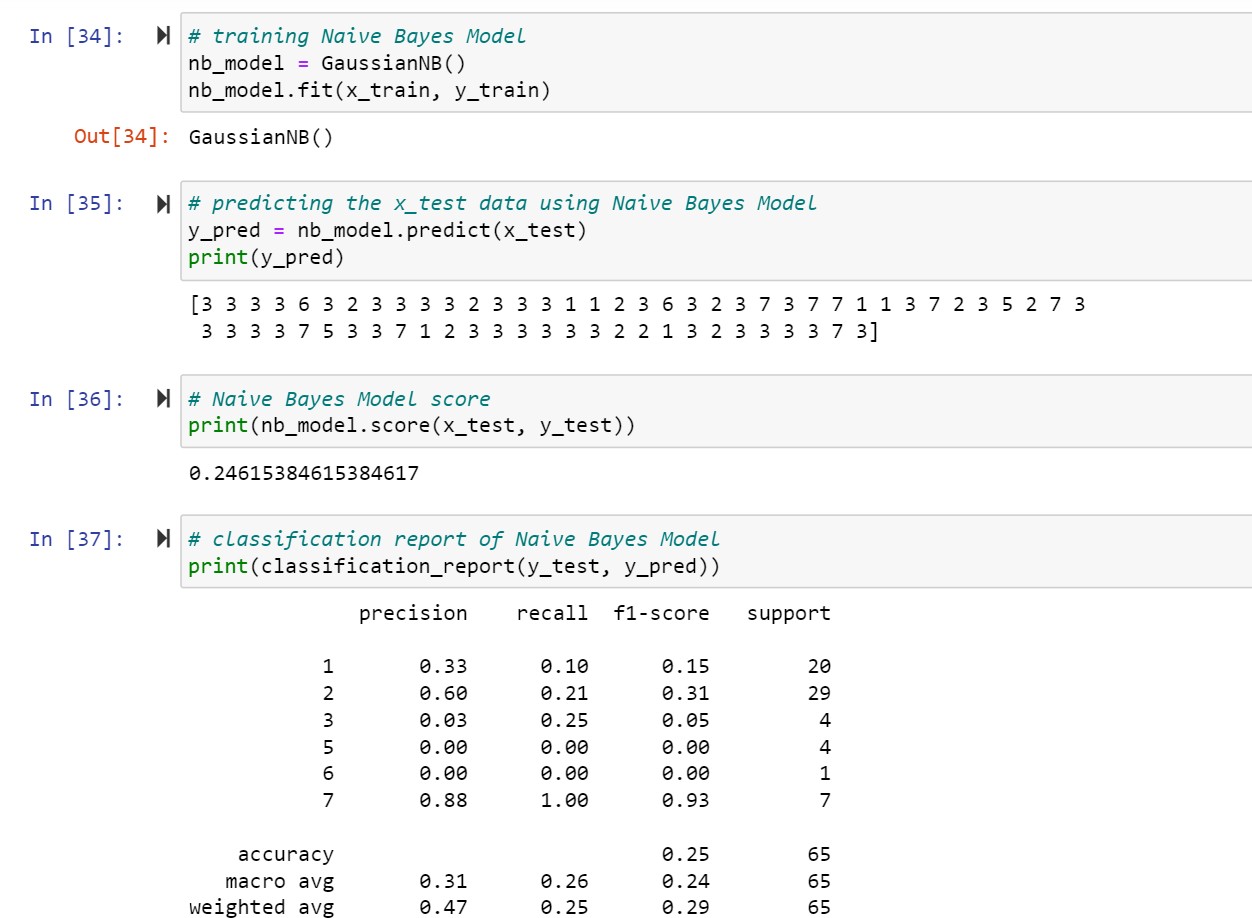
**GitHub Link: https://github.com/dheeraj3119/Assignment\_1.git**

1. Implement Naïve Bayes method using scikit-learn library. Use dataset available with name glass.

Use train\_test\_split to create the training and testing part. Evaluate the model on test part using score and classification\_report(y\_true, y\_pred)

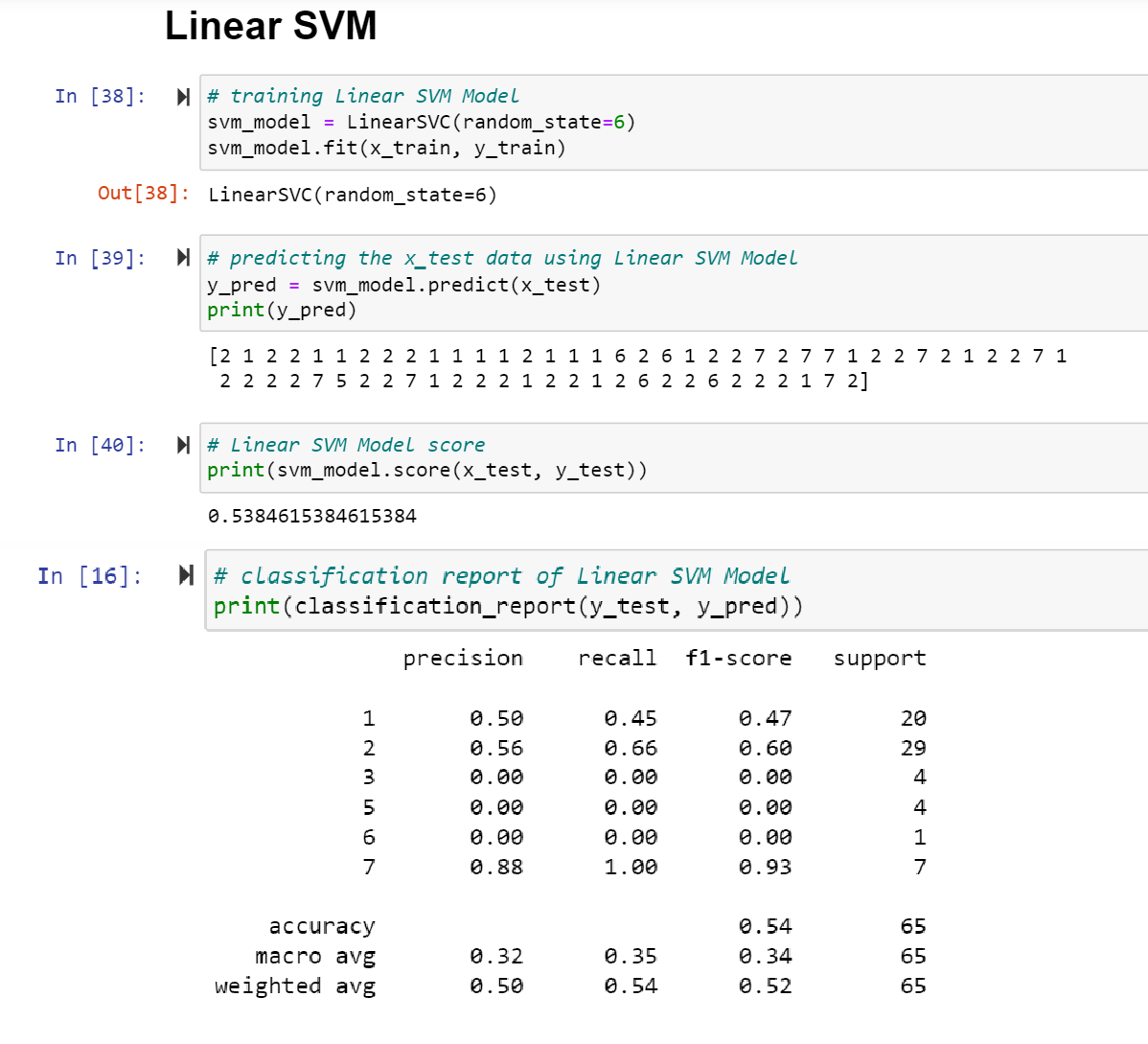






1. Implement linear SVM method using scikit-learn. Use the same dataset above.

Use train\_test\_split to create training and testing part. Evaluate the model on test part using score and classification\_report(y\_true, y\_pred)



Which algorithm you got better accuracy? Can you justify why?

Linear SVM has better accuracy than Naive Bayes Model because SVM can perform well in classifying multi-dimensional data and since Naive Bayes is based upon the frequency of occurrence it was not able to classify data.

1. Implement Linear Regression using scikit-learn
2. Import the given “Salary\_Data.csv”
3. Split the data in train\_test partitions, such that 1/3 of the data is reserved as test subset.
4. Train and predict the model.
5. Calculate the mean\_squared error.
6. Visualize both train and test data using scatter plot.

