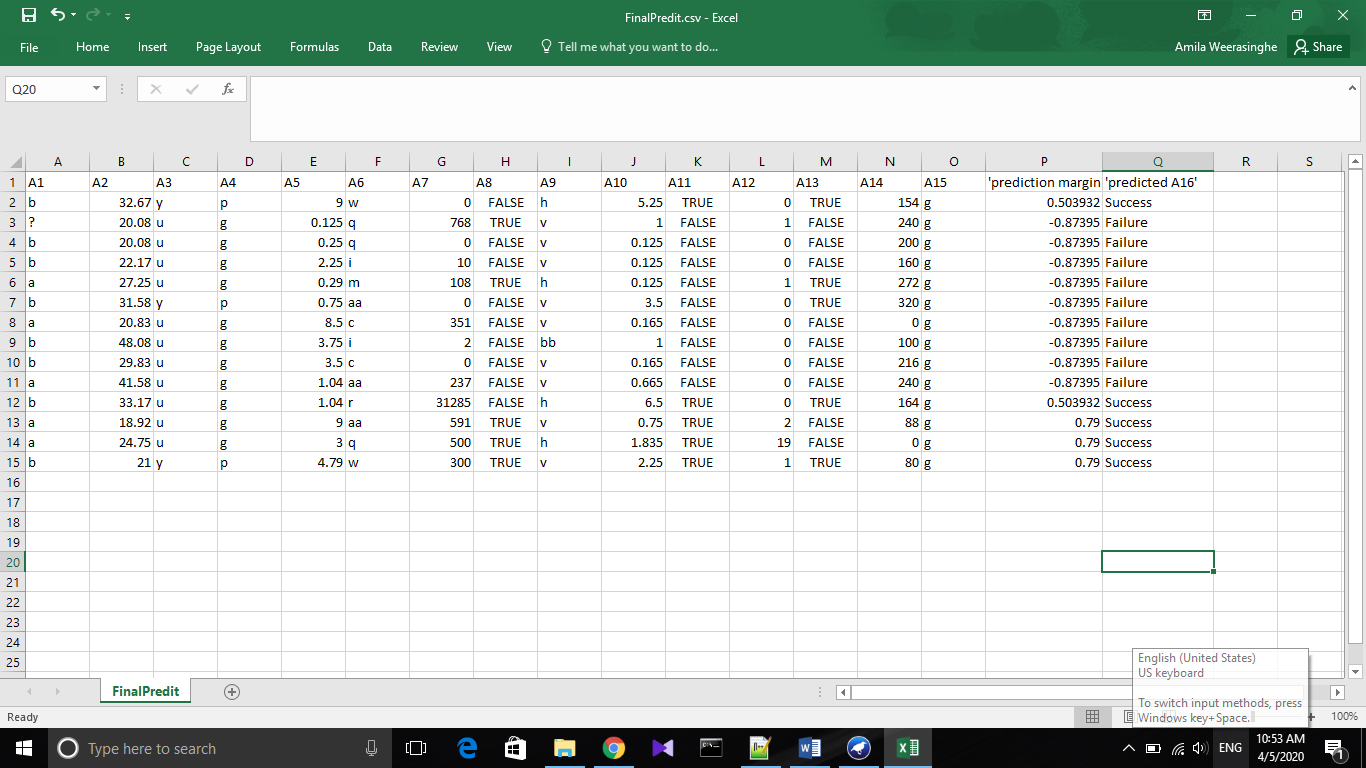
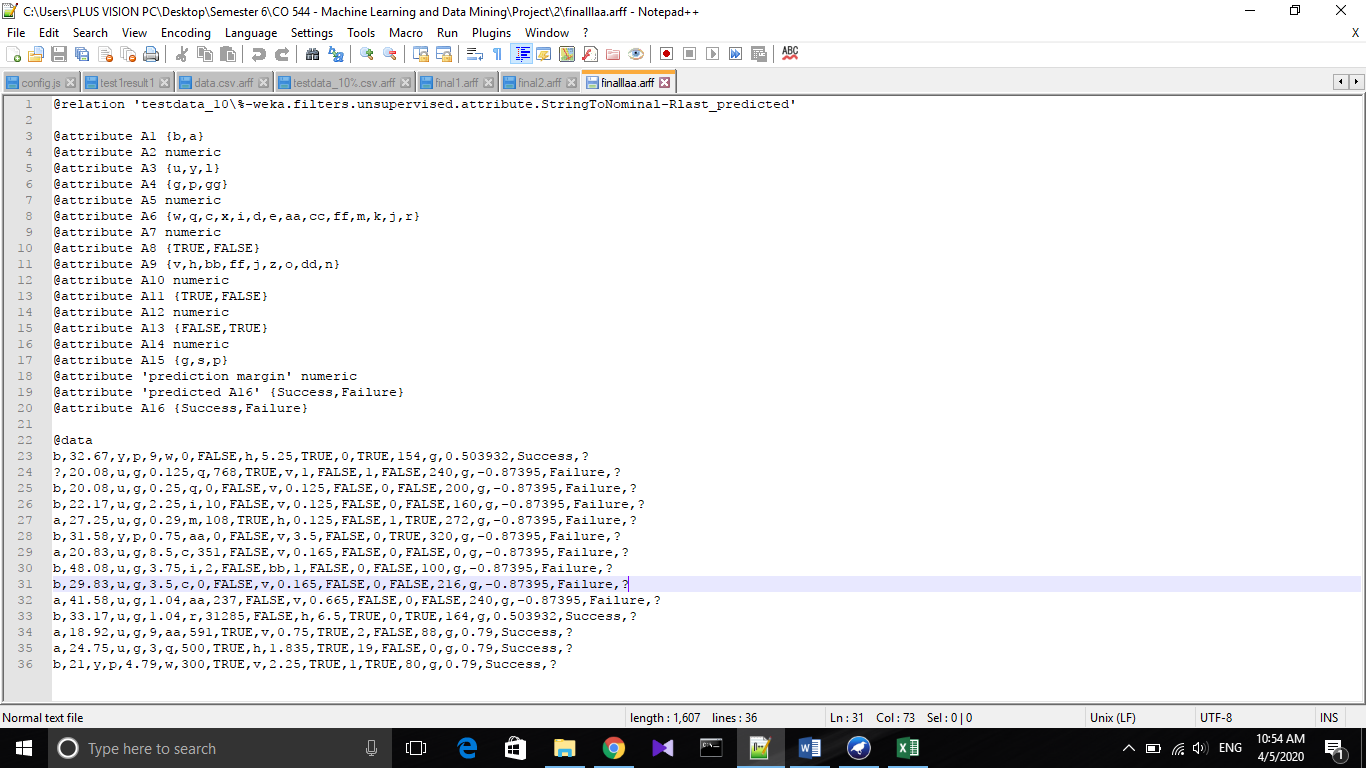
**Predictions in(CSV format ) the Predicted A16 column**

**ARFF format of the predicted data**



**Prediction margin**-

defined as the difference between the probability predicted for the actual class and the highest probability predicted for the other classes. A margin of 1 means that the correct class is predicted with 100% confidence (very good), a margin of -1 means that an incorrect class is predicted with 100% confidence (very bad).

**Procedure**

**1)**.Both Training and Test data sets were preprocessed and made to ARFF formats. For test data sets Attribute names were given and the Class (Which is to be predicted is names as “A16”)

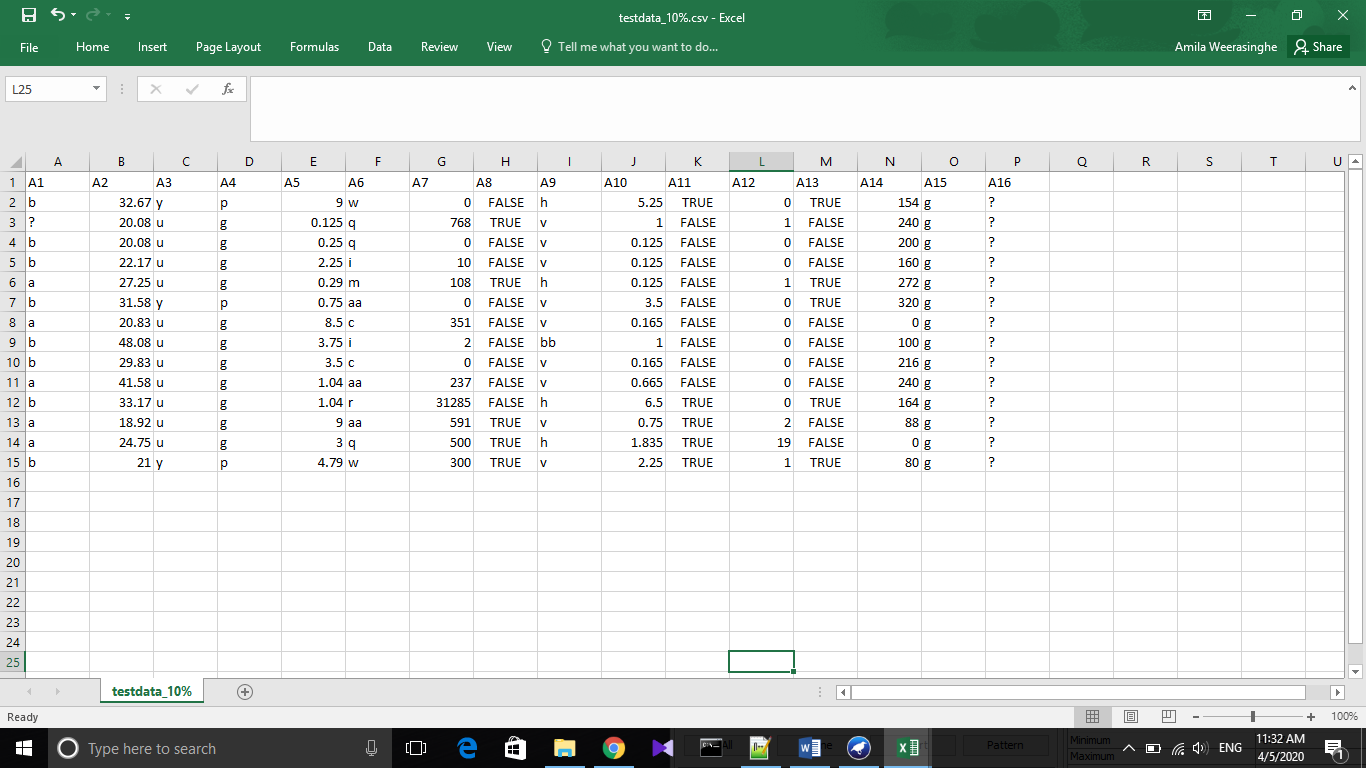


Figure 1: Modified Test data set

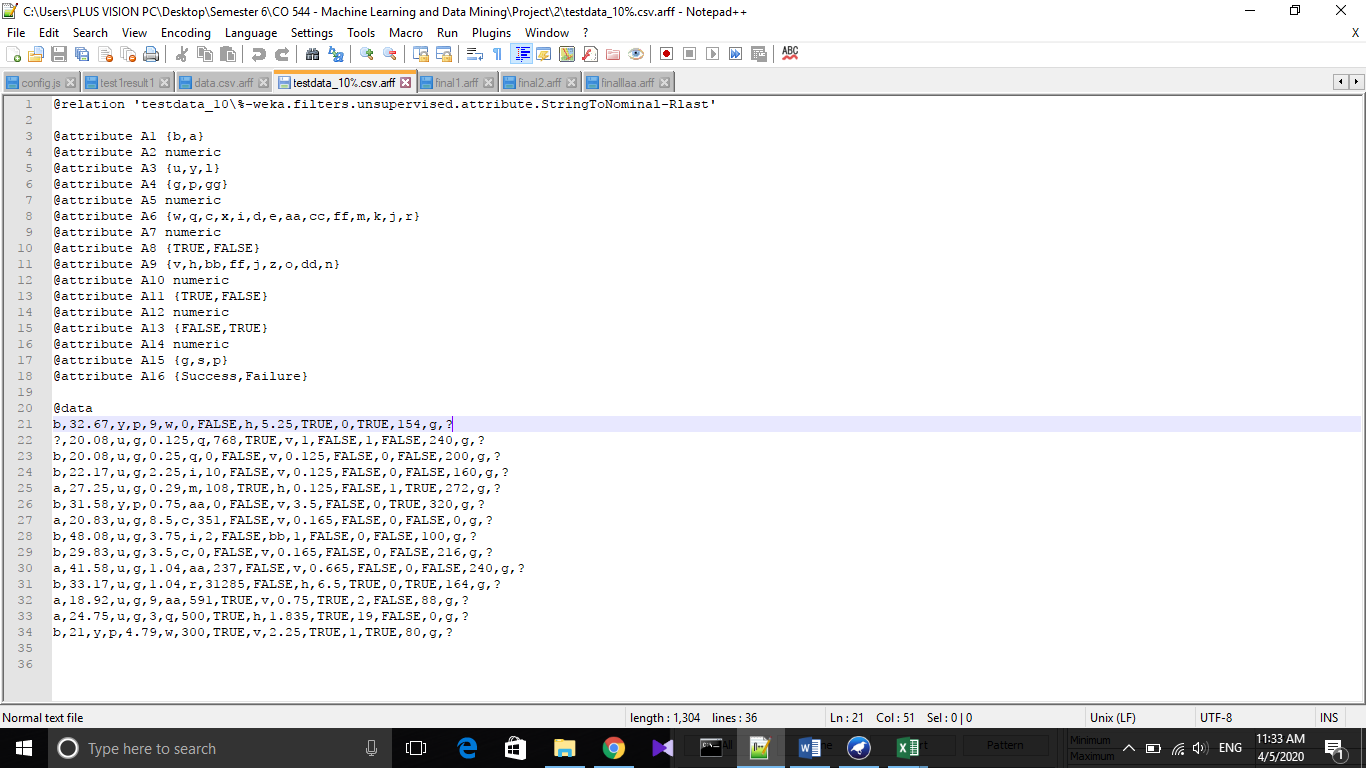
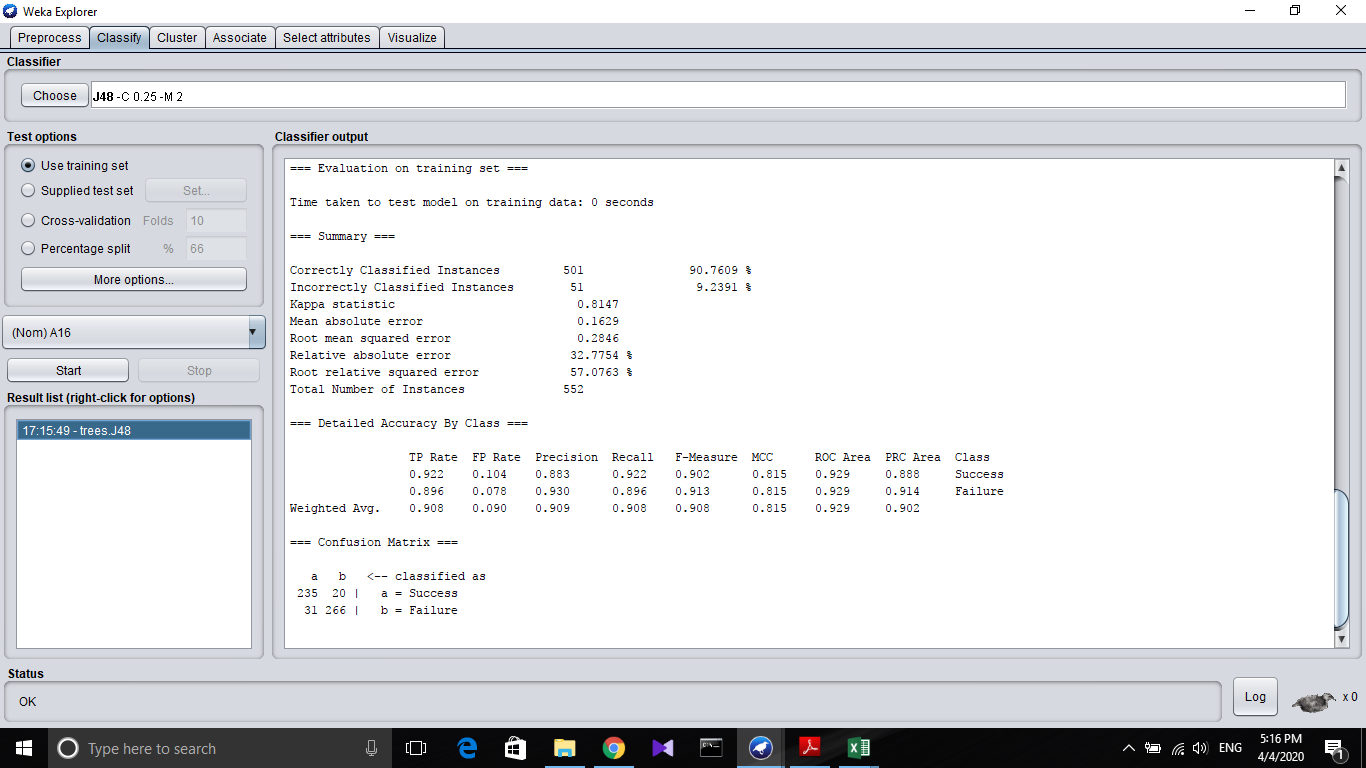
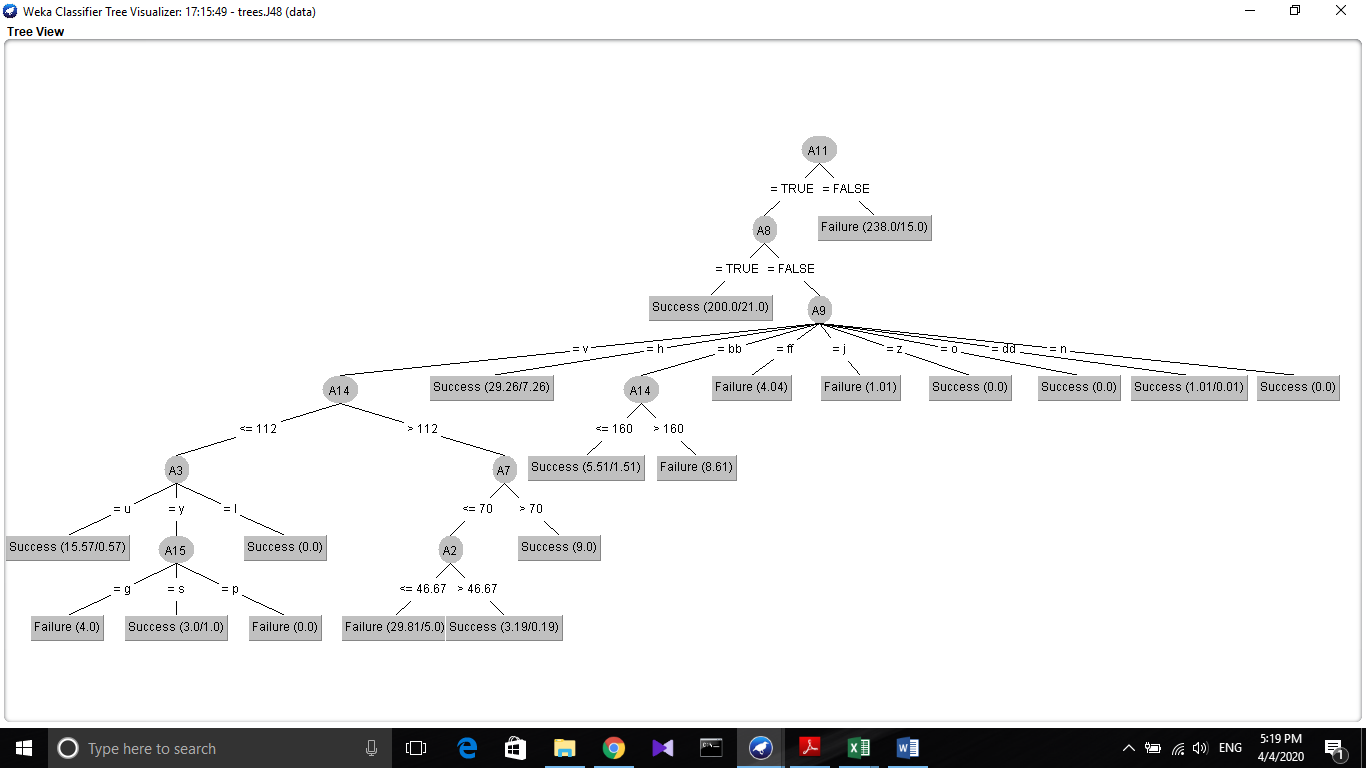


Figure 2: Modified test data in ARFF format

**2)**Training Data set classified Using J48 tree(Use as training data set)

**Correctly Classified 90.7609%**

Visualised tree(for training data set)



**3) Supplied the test data set and classified Using J48 algorithm.**

**Results were saved.**

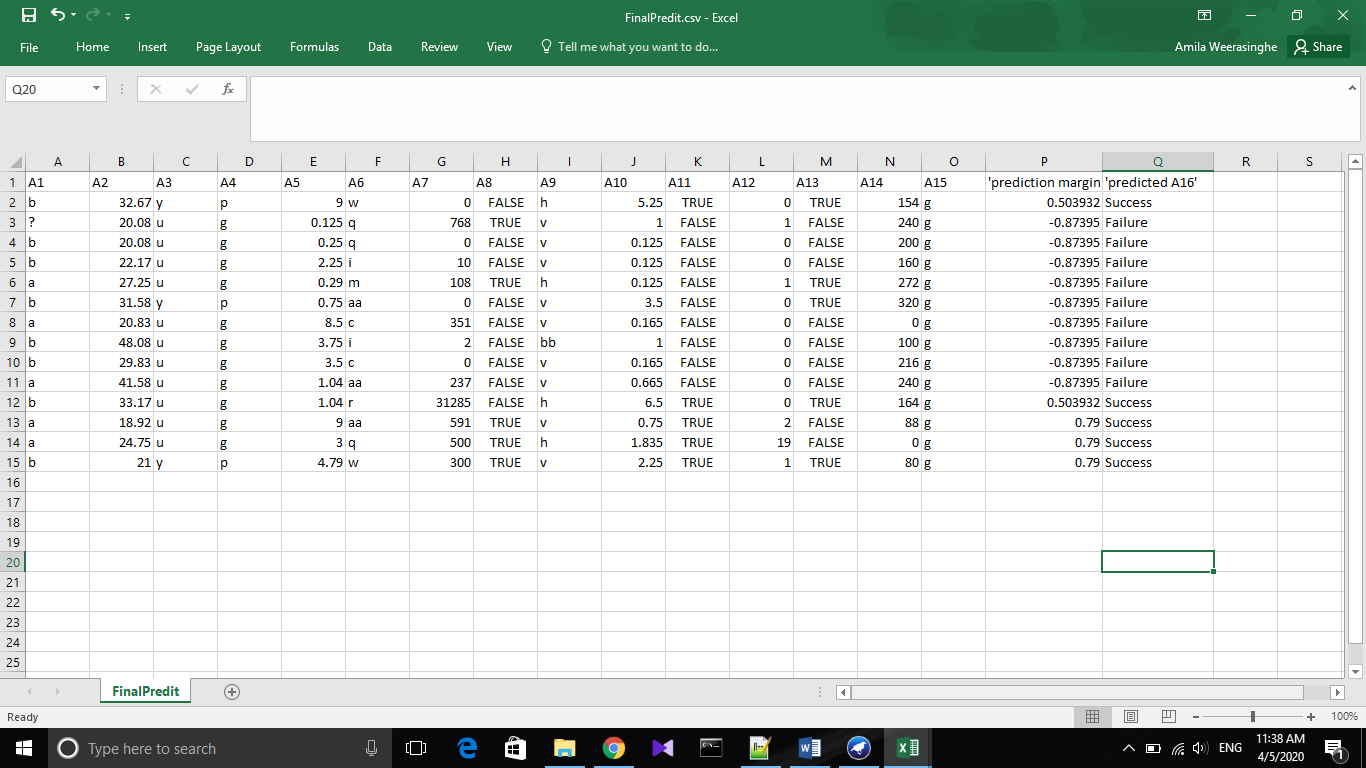
**Results**

Figure 3: Final Predictions.(Column labled as “Predicted A16”)

**Conclusion**

**Prediction margin:** This is defined as the difference between the probability predicted for the actual class and the highest probability predicted for the other classes. A margin of 1 means that the correct class is predicted with 100% confidence (very good), a margin of -1 means that an incorrect class is predicted with 100% confidence (very bad).