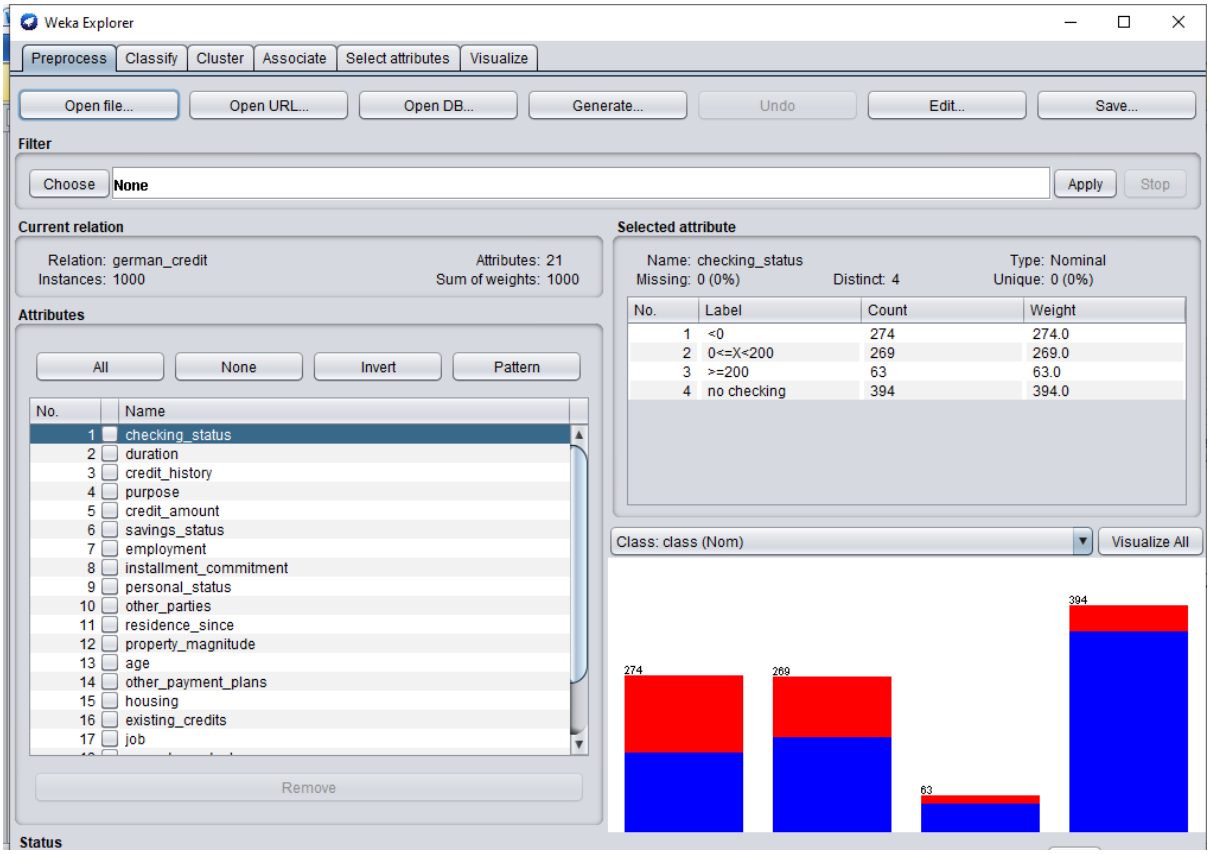
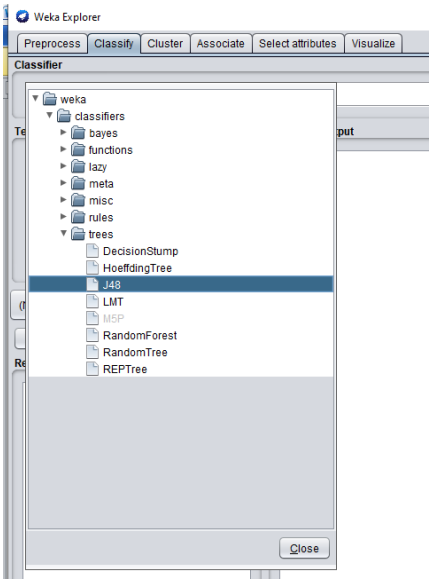
ASSIGNMENT-2

Deriving a Decision Tree from Given Dataset:

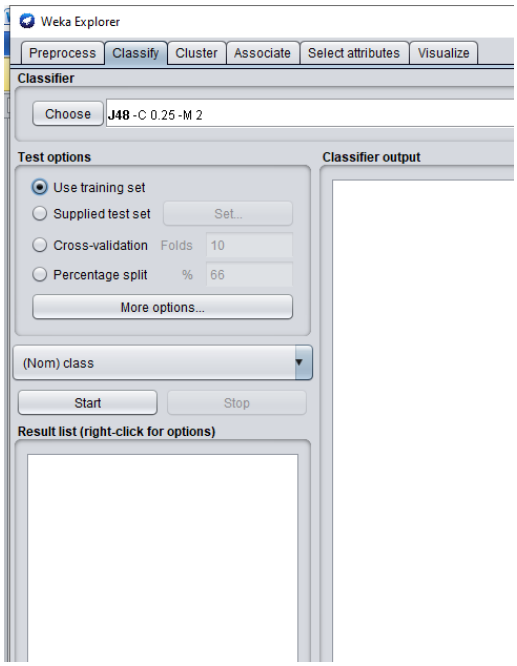
- Open the given Dataset in Weka Here we are considering German Credit Dataset



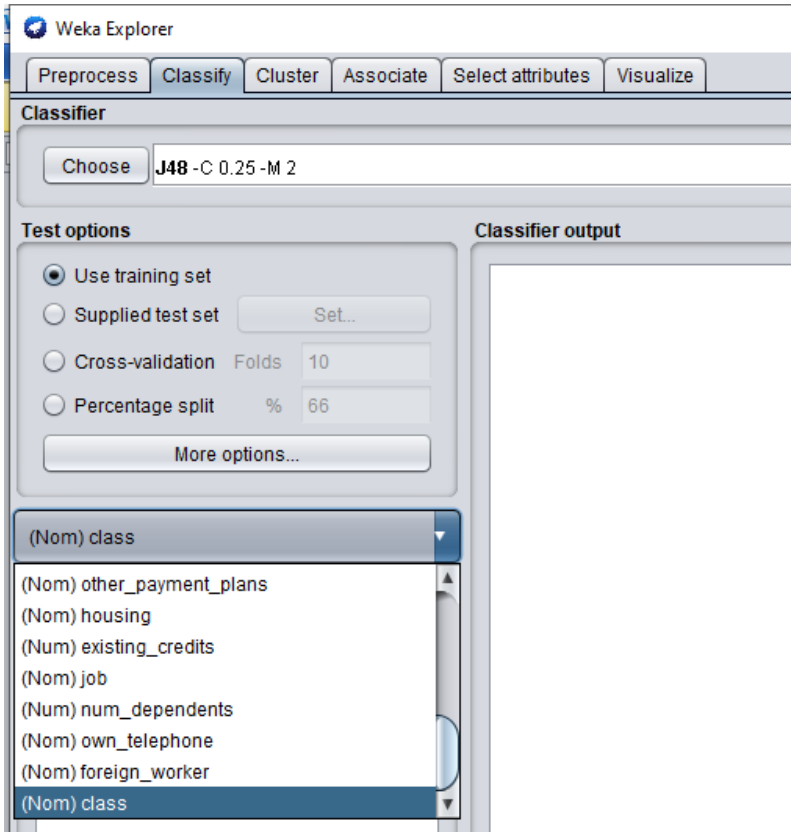
- Click on classify tab and Choose J48 from trees



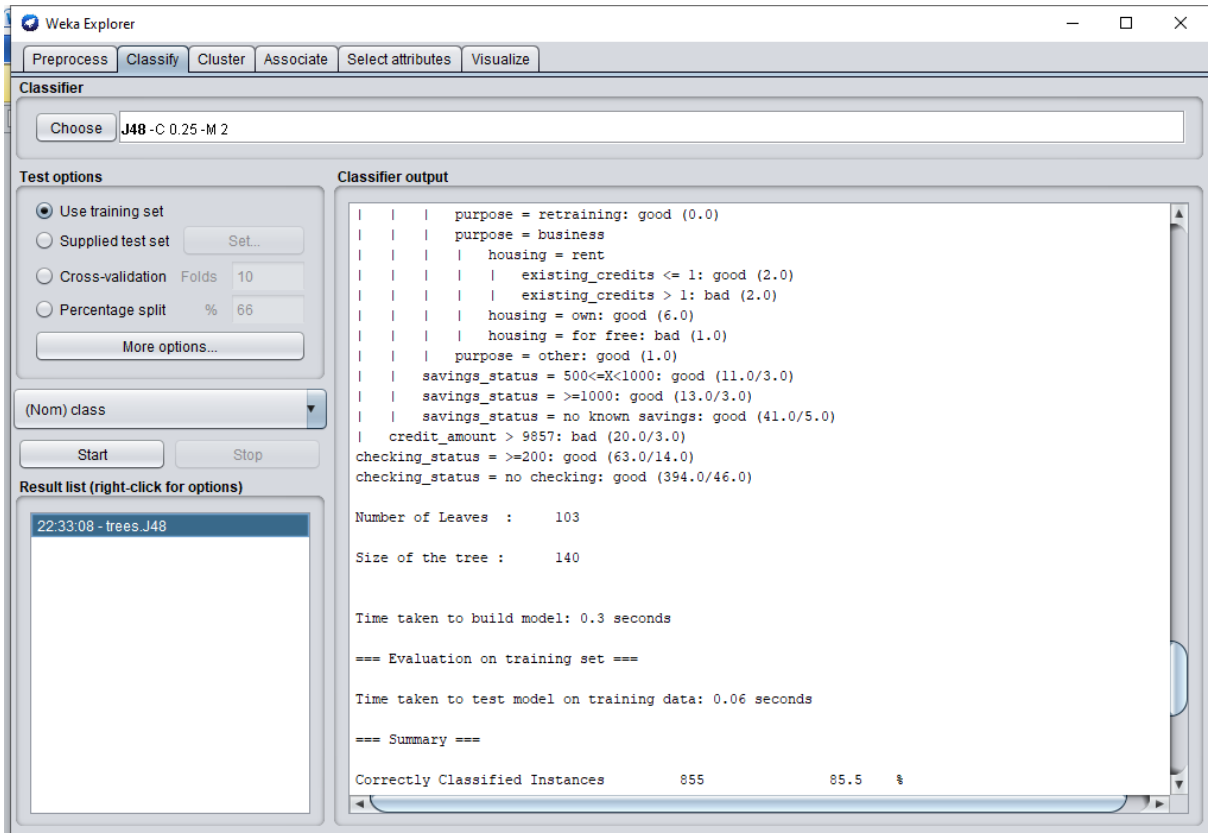
- Choose the Use training set from Test options



- Now, choose the attribute **class** from the dropdown

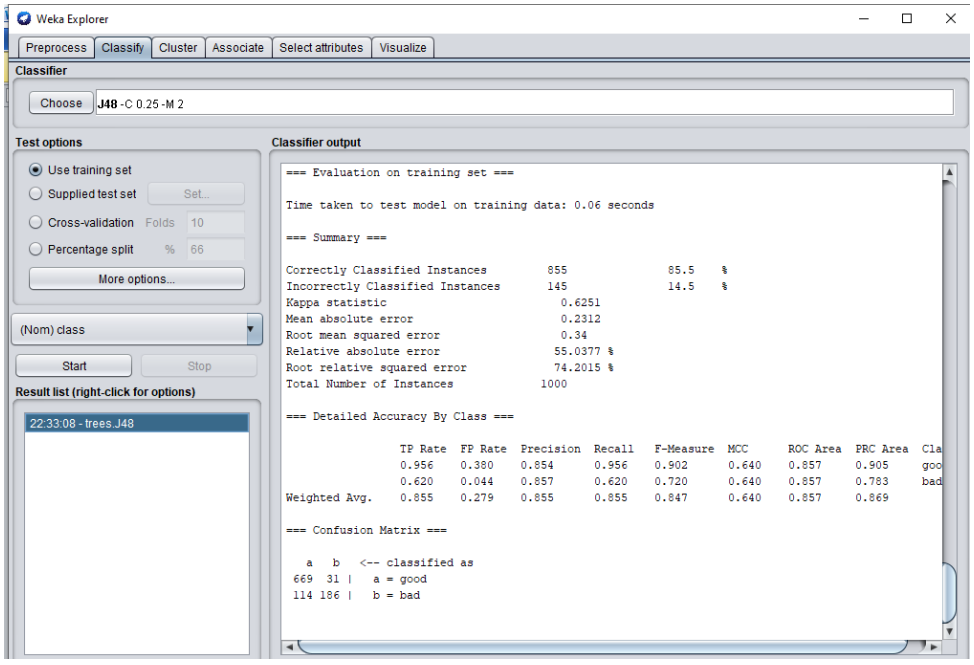


- Next click on Start. We will get Output as below:

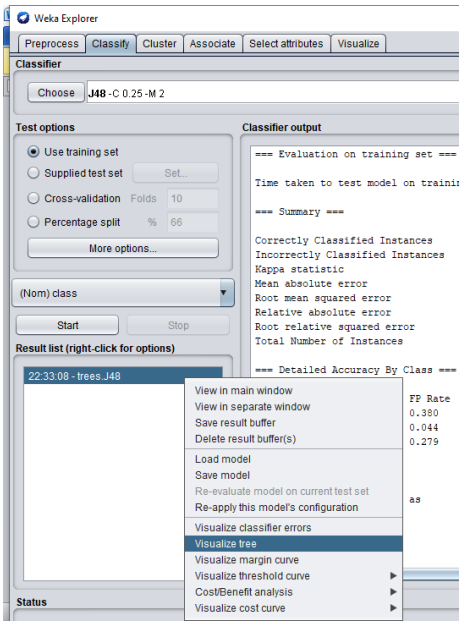


- Number of leaves = 103
- Number of tree = 140
- Time Taken to build Model = 0.3 sec

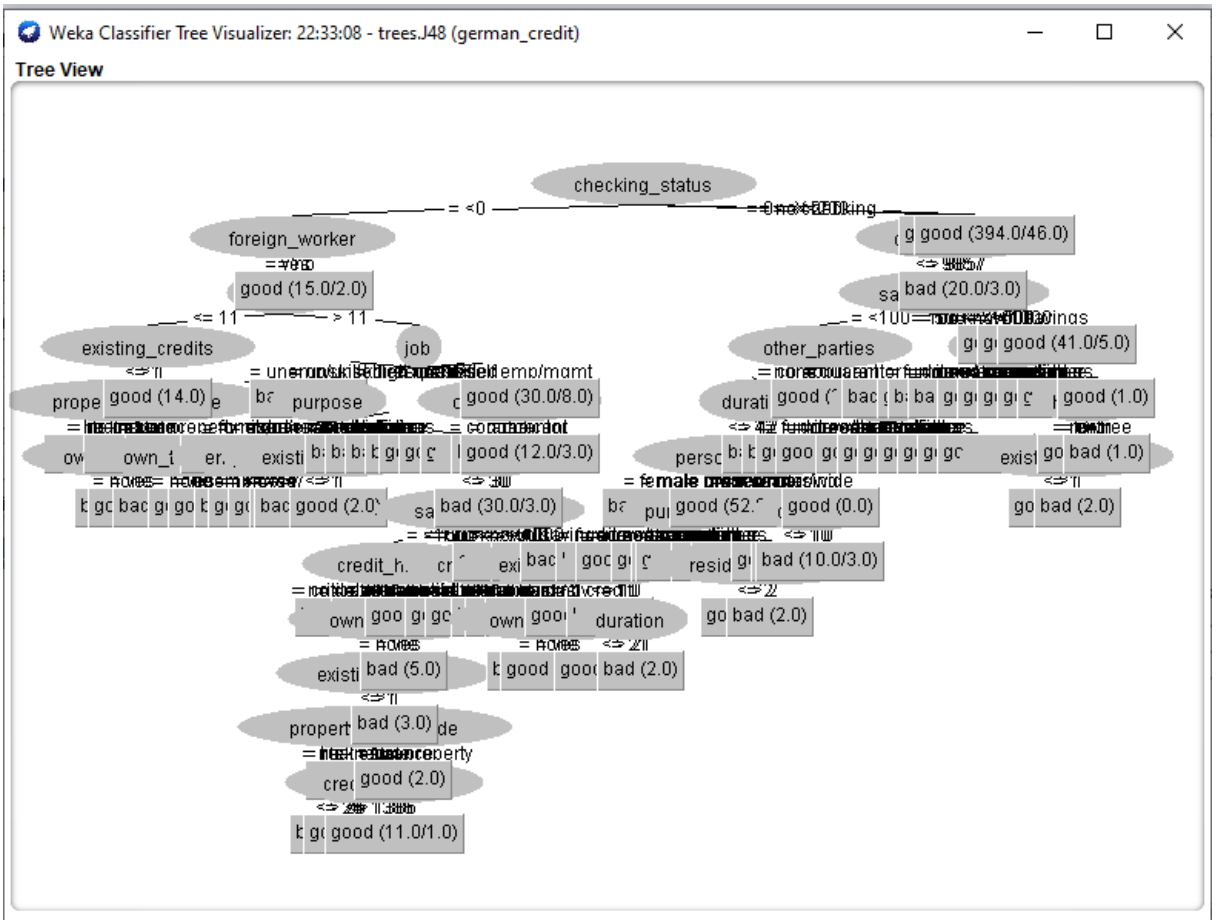
- We also get the Confusion Matrix as below:



- Right click on the option in the Result list and select the **visualize tree** option.



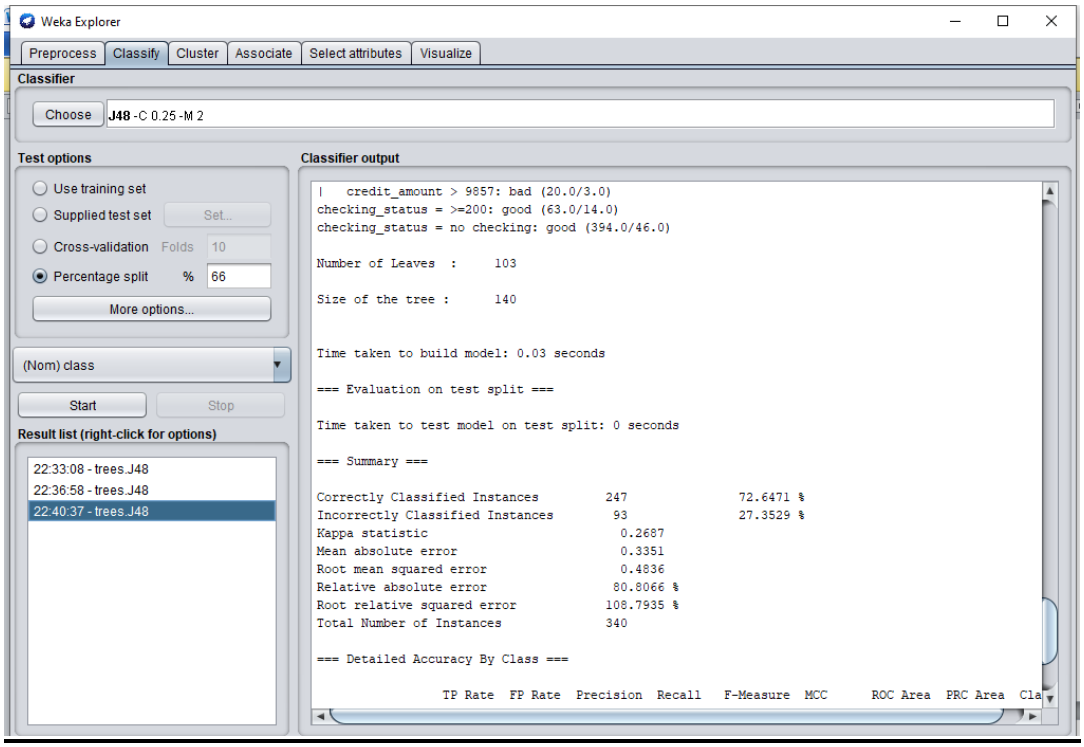
- The Output will be:



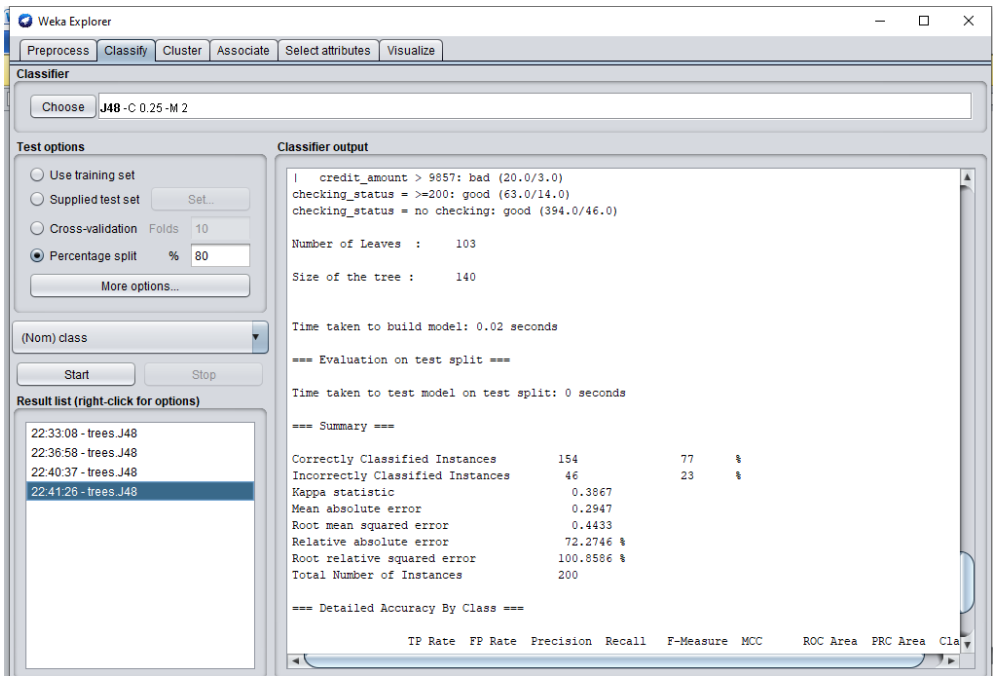
VARYING THE PERCENTAGE SPLIT FOR ACCURACY:

1) FOR J48 CLASSIFIER:

- Accuracy when Percentage split is 66%

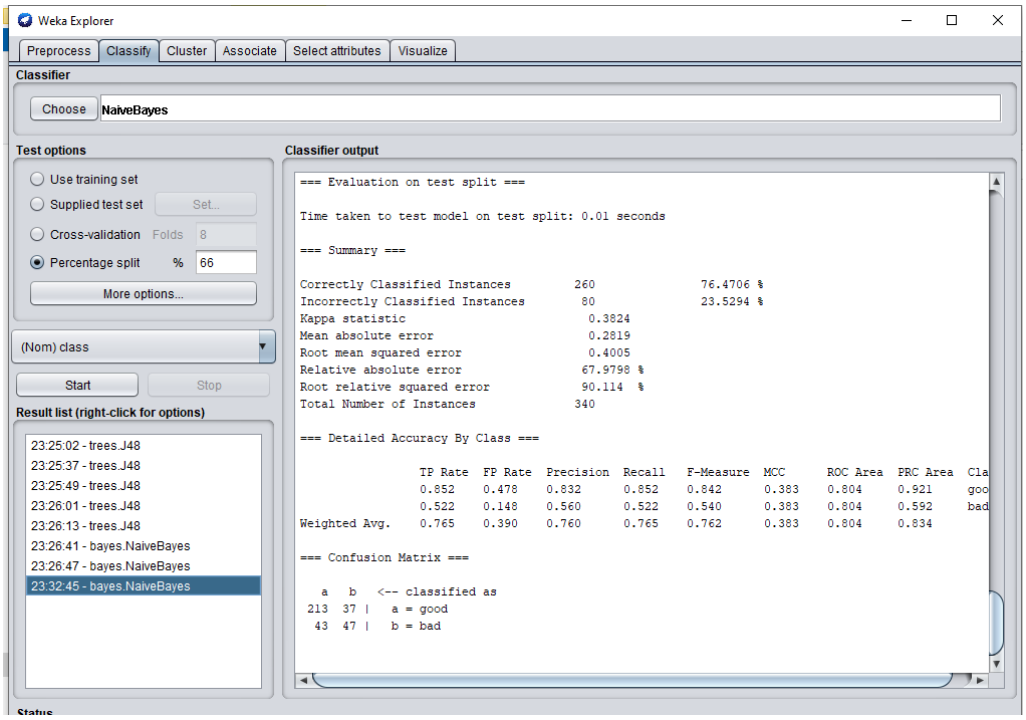


- Accuracy when Percentage split is 80%

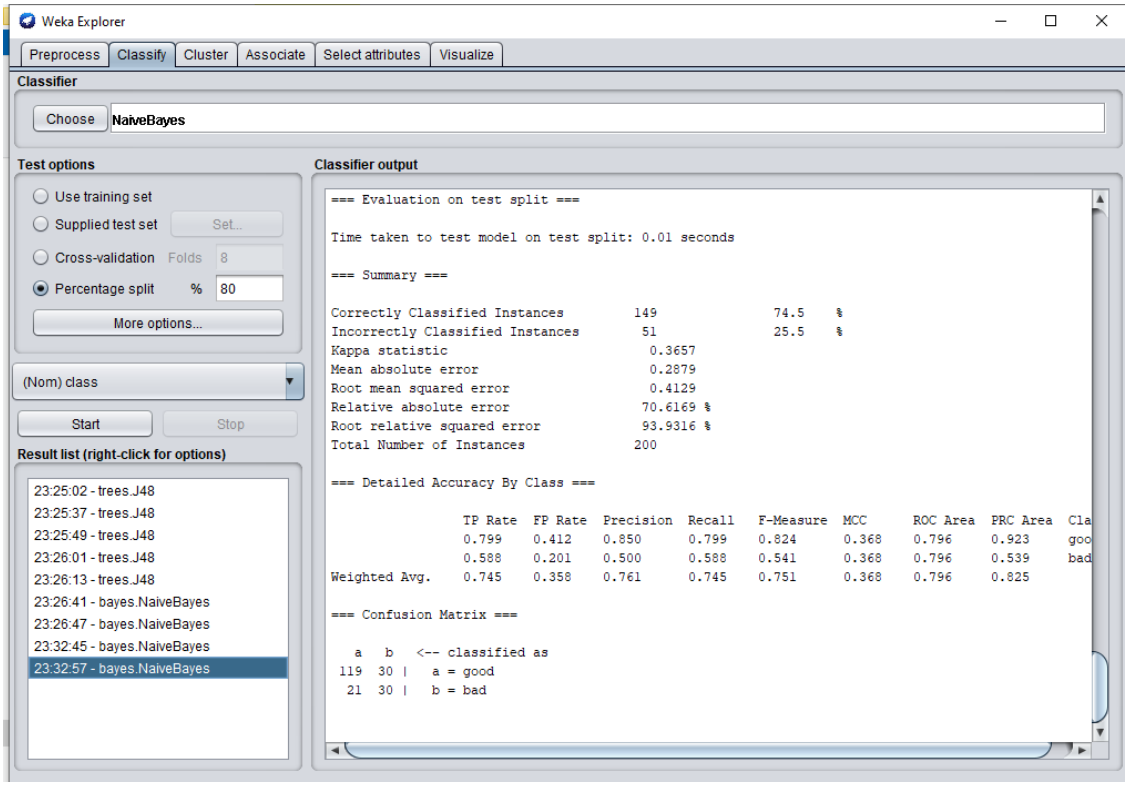


2) FOR NAIVEBAYES CLASSIFIER:

- Accuracy when Percentage split is 66%



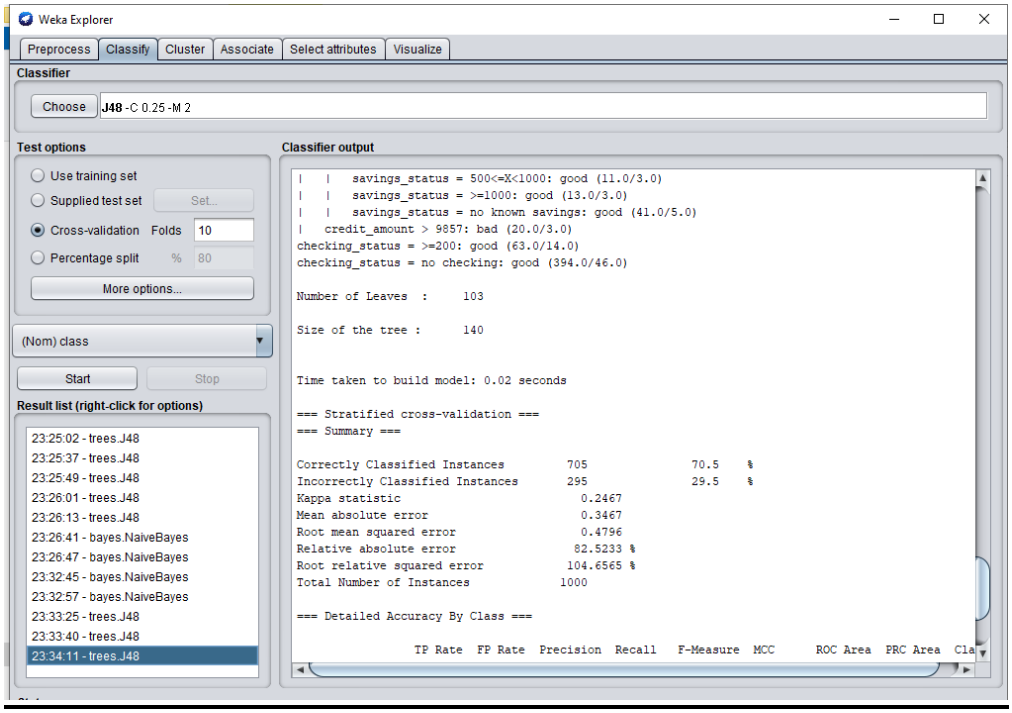
- Accuracy when Percentage split is 80%



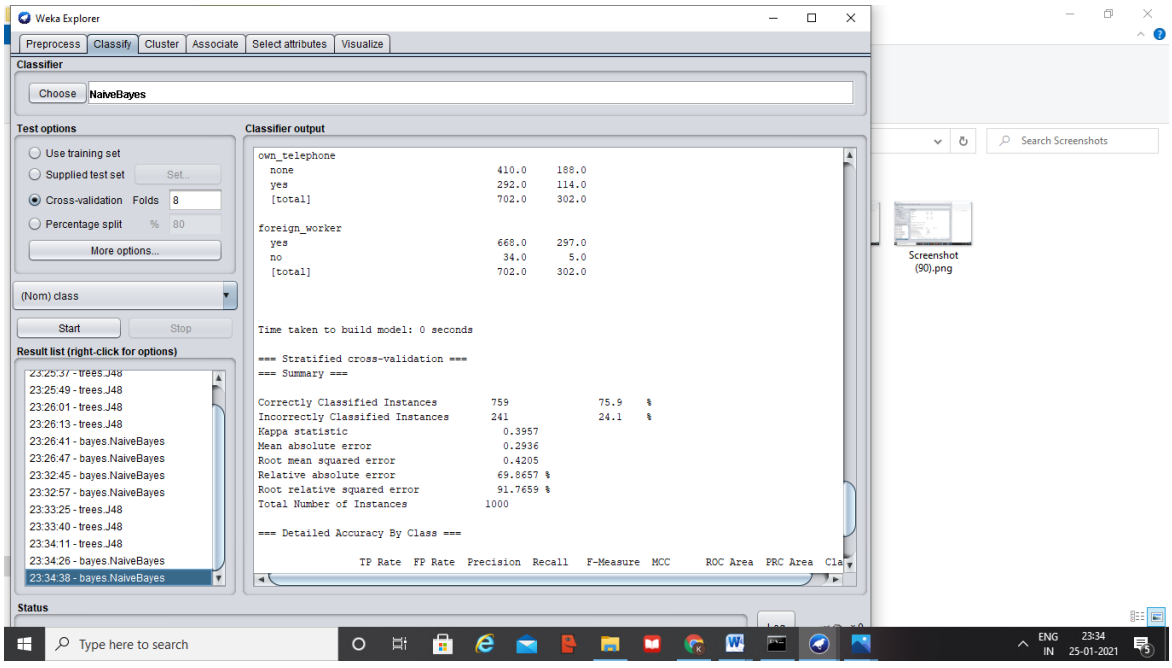
VARYING THE CROSS VALIDATIONS FOR ACCURACY:

1) FOR J48 CLASSIFIER:

- Accuracy when Cross – validation is 10

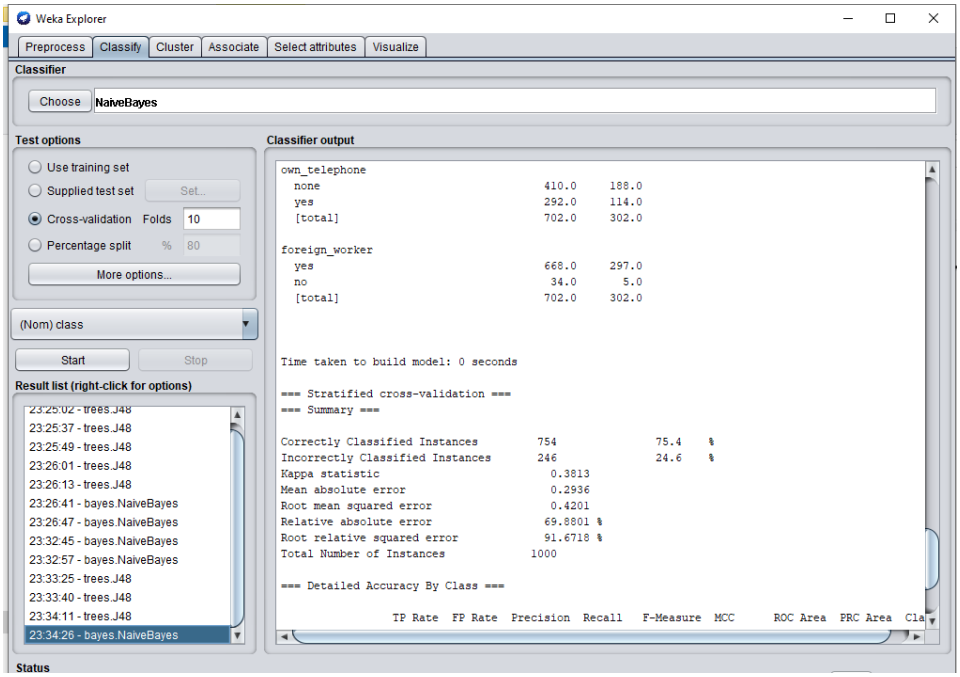
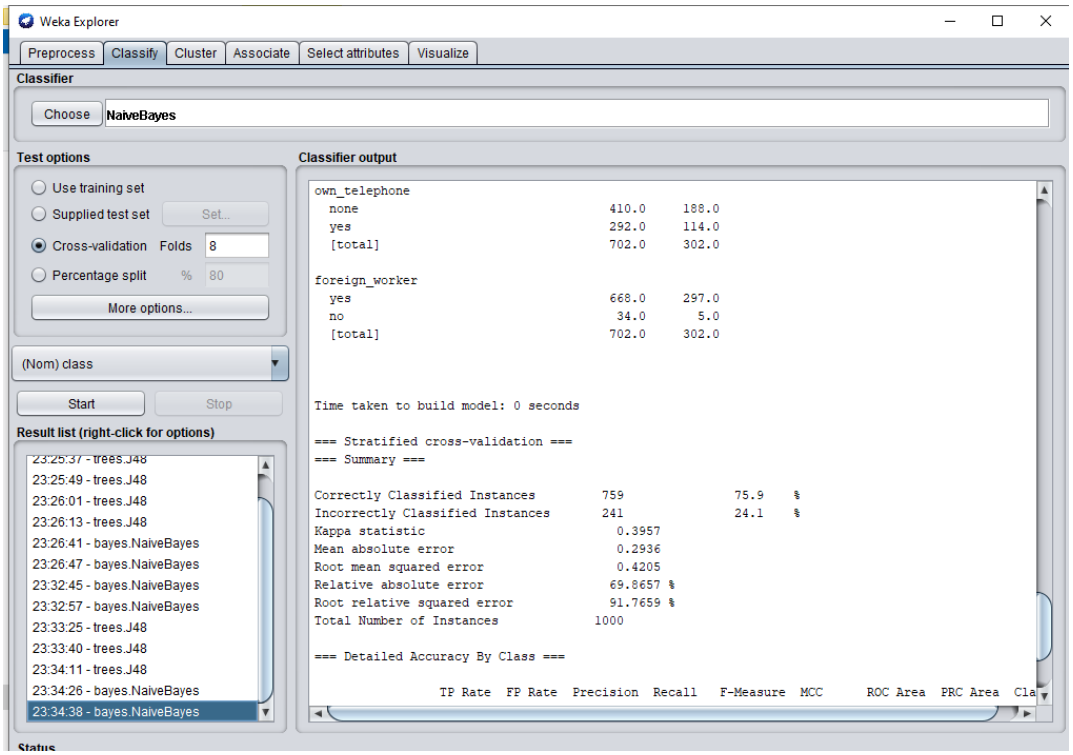


- Accuracy when Cross – validation is 8



2) FOR NAIVEBAYES CLASSIFIER:

- Accuracy when Cross – validation is 10



- Accuracy when Cross – validation is 8