**Assignment on Machine Learning Classification**

**Decision Tree**

1. What is the overall performance of the test set?

Accuracy : 0.87

2.What is the percentage of correct classification of “purchased” ?

Recall: 0.84

3.What is the percentage of correct classification of “not purchased” ?

Recall: 0.89

4.What is the percentage of correctly and wrongly classified of “purchased”?

Precision : 0.82

5.What is the percentage of correctly and wrongly classified of “not purchased”?

Precision : 0.90

6.What is the overall performance of the “purchased”?

F1\_score: 0.83

7.What is the overall performance of the “not purchased”?

F1\_score: 0.90

8.What is the average performance of recall?

Macro average(recall) : 0.87

9.What is the average performance of precision?

Macro average(precision) : 0.86

10.What is the average performance of f1-measure?

Macro average(f1-score) : 0.86

11.What is the sum of product of proportion of each class for recall?

Weighted average(recall):0.87

12.What is the sum of product of proportion of each class for precision?

Weighted average( precision):0.87

1. What is the sum of product of proportion of each class for f1-score?

Weighted average(f1-score):0.87