**Assignment on Machine Learning Classification**

**Random Forest**

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

Accuracy : 0.92

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

Recall: 0.90

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

Recall: 0.92

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

Precision : 0.86

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

Precision : 0.95

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

F1\_score: 0.88

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

F1\_score: 0.94

8.What is the average performance of recall?

Macro average(recall) : 0.91

9.What is the average performance of precision?

Macro average(precision) : 0.90

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

Macro average(f1-score) : 0.91

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

Weighted average(recall):0.92

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

Weighted average( precision):0.92

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

Weighted average(f1-score):0.92