### **EVALUATION REPORT- CLASSIFICATION**

## 1. RANDOM FOREST CLASSIFICATION ASSIGNMENT

	precision	recall	f1-score	support
0	0.93	0.92	0.92	85
1	0.86	0.88	0.87	49
accuracy			0.90	134
macro avg	0.89	0.90	0.90	134
weighted avg	0.90	0.90	0.90	134

#### 1. What is the Overall Performance of Data?

Accuracy- 0.90

2.1. What is the Correct Classification of Not Purchased?(Recall-Correctly Classified)

**Recall- 0.92** (Correct Performance Of Purchased)

2.2. What is the Correct Classification of Purchased?

**Recall- 0.88** 

3.1. What is the Correct Classification of Correct and Wrong Purchased?(Precision Talks about Wrong and Correctly Classification of Data)

Precision- 0.86 (Not Purchased, But Classified as Purchased)

Precision- 0.93 (Purchased, But Classified as Not Purchased

4. F1-Score (That measures a model's accuracy. It combines the precision and rec all scores of a model.)

0 0.93 0.92 0.92

1 0.86 0.88 0.87

5. Macro Average

Precision(Correctly and Wrongly Classified)- 0.89

Recall( Correctly Classified) - 0.90

F1-Score - 0.90

# 6. Weighted Average

Precision(Proportion rate of Weight)- 0.90

Recall(Proportion rate of Weight)- 0.90

F1-Score(Proportion rate of Weight) - 0.90

# **2. DECISION TREE ASSIGNMENT**

	precision	recall	f1-score	support
0	0.90	0.89	0.90	85
1	0.82	0.84	0.83	49
accuracy			0.87	134
macro avg	0.86	0.87	0.86	134
weighted avg	0.87	0.87	0.87	134

## 1. What is the Overall Performance of Data?

Accuracy- 0.87

2.1. What is the Correct Classification of Not Purchased? (Recall-Correctly Classified)

**Recall- 0.89** (Correct Performance Of Purchased)

2.2. What is the Correct Classification of Purchased?

Recall- 0.84

3.1. What is the Correct Classification of Correct and Wrong Purchased?(Precision Talks about Wrong and Correctly Classification of Data)

Precision- 0.82 (Not Purchased, But Classified as Purchased)

Precision- 0.90 (Purchased, But Classified as Not Purchased

4. F1-Score (That measures a model's accuracy. It combines the precision and rec all scores of a model.)

0 0.90 0.89 0.90

1 0.82 0.84 0.83

5. Macro Average

Precision(Correctly and Wrongly Classified)- 0.86

Recall(Correctly Classified)- 0.87

F1-Score - 0.86

6. Weighted Average

Precision(Proportion rate of Weight)- 0.887

Recall(Proportion rate of Weight)- 0.87

F1-Score(Proportion rate of Weight) - 0.87

The Result of Random Forest Classification Algorithm is good accuracy value 0.90 compared to all Algorithm.