#### 1. RANDOM FOREST CLASSIFICATION REPORT

### **Accuracy**:

overall performance of purchased = 0.91

#### Recall:

correctly purchased classify =0.88 correctly not purchased classify =0.93

## precision:

correct purchase and wrongly correct purchase = 0.88 not correct purchase and wrongly not correct purchase = 0.93

### F1-Measure:

Purchased F1-score=0.88

Not purchased F1-score=0.93

## Macro average:

Average performance of precision =0.90

Average performance of Recall = 0.90

Average performance of F1-score = 0.90

# Weighted Average:

Proportion rate of precision= 0.91

Proportion rate of Recall = 0.91

Proportion rate of F1-score= 0.91

# Support:

total count of non purchased =85

total count of purchased= 49

Total count of test set=79+6+6+43=134

### 2.DECISION TREE CLASSIFICATION REPORT

### Accuracy:

overall performance of purchased = 0.87

#### Recall:

correctly purchased classify = 0.73

correctly not purchased classify = 0.94

## precision:

correct purchase and wrongly correct purchase = 0.88

not correct purchase and wrongly not correct purchase = 0.86

### F1-Measure:

Purchased F1-score=0.80

Not purchased F1-score=0.90

## Macro average:

Average performance of precision = 0.87

Average performance of Recall = 0.84

Average performance of F1-score = 0.85

# Weighted Average:

Proportion rate of precision= 0.87

Proportion rate of Recall = 0.87

Proportion rate of F1-score = 0.86

# Support:

total count of non purchased =85

total count of purchased= 49

Total count of test set=80+5+13+36=134

#### 3.SUPPORT VECTORE MACHINE

### **Accuracy**:

overall performance of purchased = 0.63

#### Recall:

correctly purchased classify =0.00 correctly not purchased classify =1.00

## precision:

correct purchase and wrongly correct purchase = 0.00 not correct purchase and wrongly not correct purchase = 0.63

### F1-Measure:

Purchased F1-score=0.00

Not purchased F1-score=0.78

## Macro average:

Average performance of precision =0.32

Average performance of Recall =0.50

Average performance of F1-score = 0.39

# Weighted Average:

Proportion rate of precision= 0.40

Proportion rate of Recall = 0.63

Proportion rate of F1-score = 0.49

# Support:

total count of non purchased =85

total count of purchased= 49

Total count of test set=85+0+49+0=134