# CLASSIFICATION ASSIGNMENT

1) What is the overall performance of the model ?

First of all overall performance means the accuracy of the model

| Method | Accuracy |
|---|---|
| SVM | 0.80 |
| RF | 0.89 |
| DT | 0.84 |

2)which is the best model for this data set.

Random forest is the best model for this data set because the accuracy of this model was high.

3)what is the correct classification of purchased ?

(Purchased=recall)

| Method | Recall(1) |
|---|---|
| SVM | 0.46 |
| RF | 0.85 |
| DT | 0.80 |

4)What is the correctly classified of non-Purchased ?

| Method | Recall(0) |
|---|---|
| SVM | 0.97 |
| RF | 0.91 |
| DT | 0.86 |

5) what is the correctly and wrongly classified of purchased and non purchased ?

| Method | Precision |
|---|---|
| SVM | Purchased=0.90<br>Non-purchased=0.78 |
| DT | Purchased=0.75<br>Non-purchased=0.89 |
| RF | Purchased=0.83<br>Non-purchased=0.92 |

6)What is the overall performance of purchased ?

| Method | F1-Score |
|---|---|
| SVM | 0.61 |
| DT | 0.80 |

| | |
|---|---|
| RF | 0.84 |

7)What is the correctly classification of non-Purchased ?

| Method | F1-Score |
|---|---|
| SVM | 0.87 |
| DT | 0.86 |
| RF | 0.92 |