Classification Confusion Matrix Report

RF:

Dataset: Social_Network_Ads.csv

Function: RandamForestClassifier

Classification Report:

support	f1-score	recall	precision	
79 41	0.93 0.87	0.92 0.88	0.94	0 1
120	0.91			accuracy
120	0.90	0.90	0.90	macro avg
120	0.91	0.91	0.91	weighted avg

- 1. Over all accuracy or Performance of the model 0.91
- 2. Current Purchased classification Percentage 0.88
- 3. Current Non Purchased Classification Percentage 0.92
- 4. Over all Purchased Classification Percentage- 0.86
- 5. Over all Non Purchased Classification Percentage- 0.94
- 6. Average Over all Classification Percentage- 0.90
- 7. Average Over all Current Classification Percentage- 0.90

DT:

Dataset: Social_Network_Ads.csv

Function: DecisionTreeClassifier

Classification Report:

	precision	recall	f1-score	support
0 1	0.92 0.83	0.91 0.85	0.92 0.84	79 41
accuracy			0.89	120
macro avg	0.88	0.88	0.88	120
weighted avg	0.89	0.89	0.89	120

- 1. Over all accuracy or Performance of the model 0.89
- 2. Current Purchased classification Percentage 0.85
- 3. Current Non Purchased Classification Percentage 0.91
- 4. Over all Purchased Classification Percentage- 0.83

- 5. Over all Non Purchased Classification Percentage- 0.92
- 6. Average Over all Classification Percentage- 0.88
- 7. Average Over all Current Classification Percentage- 0.88

SVM:

Dataset: Social_Network_Ads.csv

Function: SVC

Classification Report:

	precision	recall	f1-score	support
0 1	0.70 0.89	0.99	0.82 0.32	79 41
accuracy macro avg weighted avg	0.80 0.77	0.59 0.72	0.72 0.57 0.65	120 120 120

- 1. Over all accuracy or Performance of the model 0.72
- 2. Current Purchased classification Percentage 0.20
- 3. Current Non Purchased Classification Percentage 0.99
- 4. Over all Purchased Classification Percentage- 0.89
- 5. Over all Non Purchased Classification Percentage- 0.70
- 6. Average Over all Classification Percentage- 0.80
- 7. Average Over all Current Classification Percentage- 0.59