Accuracy

Accuracy measures how often the model is correct.

Precision

Of the positives predicted, what percentage is truly positive?

Precision does not evaluate the correctly predicted negative cases:

Sensitivity (Recall)

Of all the positive cases, what percentage are predicted positive?

Sensitivity (sometimes called Recall) measures how good the model is at predicting positives.

F-score

F-score is the "harmonic mean" of precision and sensitivity.

2 * ((Precision * Sensitivity) / (Precision + Sensitivity))

Macro Average

The macro-average gives equal weight to each class, regardless of the number of instances.

Weighted Average

Calculated by taking the mean of all per-class F1 scores **while considering each class's support**.

Support : number of actual occurrences of the class in the dataset.

Random Forest - Classification - Social_Network_Ads

```
: print(clf_report)
```

	precision	recall	f1-score	support
0	0.92	0.91	0.92	77
1	0.84	0.86	0.85	43
accuracy			0.89	120
macro avg	0.88	0.88	0.88	120
weighted avg	0.89	0.89	0.89	120

Decision Tree - Classification - Social_Network_Ads

```
print(clf_report)
```

	precision	recall	f1-score	support
0	0.88	0.87	0.88	77
1	0.77	0.79	0.78	43
accuracy			0.84	120
macro avg	0.83	0.83	0.83	120
weighted avg	0.84	0.84	0.84	120

Support Vector - Classification - Social_Network_Ads

```
: print(clf_report)
```

	precision	recall	f1-score	support
0	0.64	1.00	0.78	77
1	0.00	0.00	0.00	43
accuracy			0.64	120
macro avg	0.32	0.50	0.39	120
weighted avg	0.41	0.64	0.50	120

By checking the values,

Random Forest Classification gives best Model.