

Edit
View
Insert
Cell
Kernel
Widgets
Help

Code

```
[18]: print(clf_report)
```

```

                precision    recall  f1-score   support

     0       0.76      0.96      0.85         85
     1       0.88      0.47      0.61         49

 accuracy          0.78         134
 macro avg       0.82      0.72      0.73         134
 weighted avg    0.81      0.78      0.76         134

```

```
[19]: print (cm)
```

```
[[82  3]
 [26 23]]
```

1	What is the overall performance of SVM Model?	0.78	
	Generally an accuracy of 0.78 means that the model correct about 78% might be considered decent.		
3	What is the correct classification of not purchased?		
	The model has a 96% true negative rate for the 'not purchased' class	0.96	
4	Tells us how many of the actual purchase we were able to predict correctly with our model.		
	The model achieved a 47% true positive rate for predicting actual purchases	0.47	
5	What is Precision?	0.76	0.88
	The precision for the 'false' class is 76%, indicating that 76% of the predicted 'false' instances are correct. For the 'true' class, the precision is 88%, signifying an 88% accuracy in predicting 'true' instances		
6	The value of recall and precision should be high in this case we need to use F1 measure as metrics to validate our model perfomance explain on the output.		

	A high F1-score for the false class (negative class) 85% that the model has good precision and recall for predicting instances of the false class.		
	A lower F1-score for the true class (positive class) 61% indicates that the model's performance in predicting instances of the true class is not as good		
7	Macro average precision: 0.82 (82%) Macro average recall: 0.72 (72%) Macro average F1-score: 0.73 (73%) Macro average calculates the metric independently for each class and then takes the average, giving each class equal weight.		

True Positive (TP): Correctly predicted positive instances.

False Positive (FP): Incorrectly predicted positive instances.

True Negative (TN): Correctly predicted negative instances.

False Negative (FN): Incorrectly predicted negative instances.

