**PERFORMANCE AND KEY INSIGHTS FOR LOGISTIC REGRESSION**

* Approached train data set to performed the logistic regression.
* After that, selected the x and y values to perform the model.

x = train[['ApplicantIncome', 'CoapplicantIncome','LoanAmount', 'Credit\_History']]

train['dep'] = np.where(train['Loan\_Status'] == 'Y',1,0)

y = train['dep']

* Able to understand the relationship between dependent vs independent variable.
* Created the logistic regression model.
* Analyzed the data through frequent of 1 and 0 able to classify the customer with proper loan values.
* Algorithm predicts the right customers and make them classified into proper prediction of probability.

1 0

1🡺[95 97]

0🡺[44 378]

* By seeing the above matrix, we can predict that True positive, True negative and false positive, false negative.
* With same logic performed with the test data and predicted the loan status.