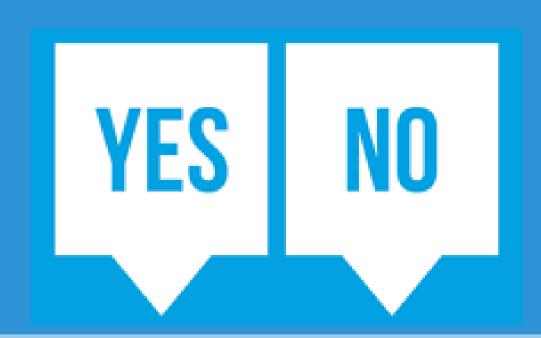
Bank Marketing

Machine Learning Project



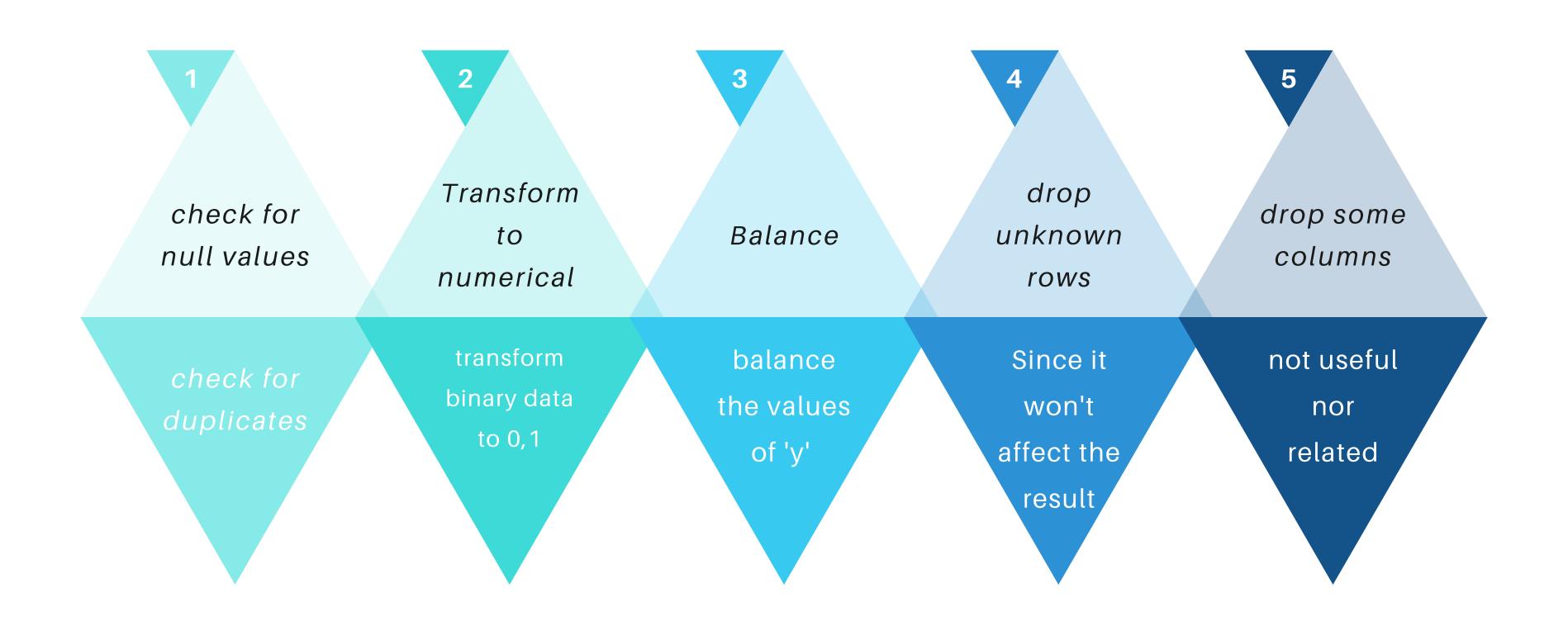
papered by: Sarah Ali Bajaba Arwa Alqahaiz

Introduction



Predict if the client will subscribe a term deposit after a marketing campaigns of a Portuguese banking institution.

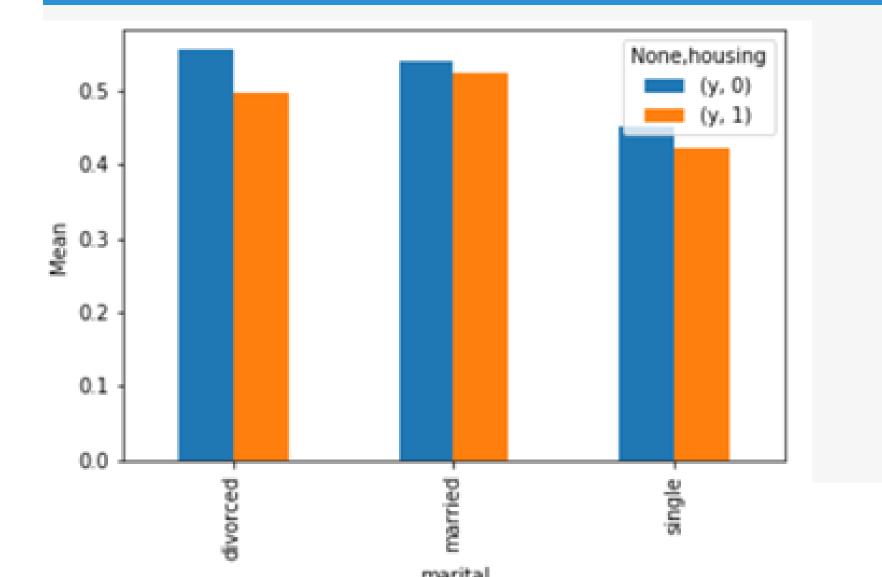
Data Preprocessing



Questions to better understand the data

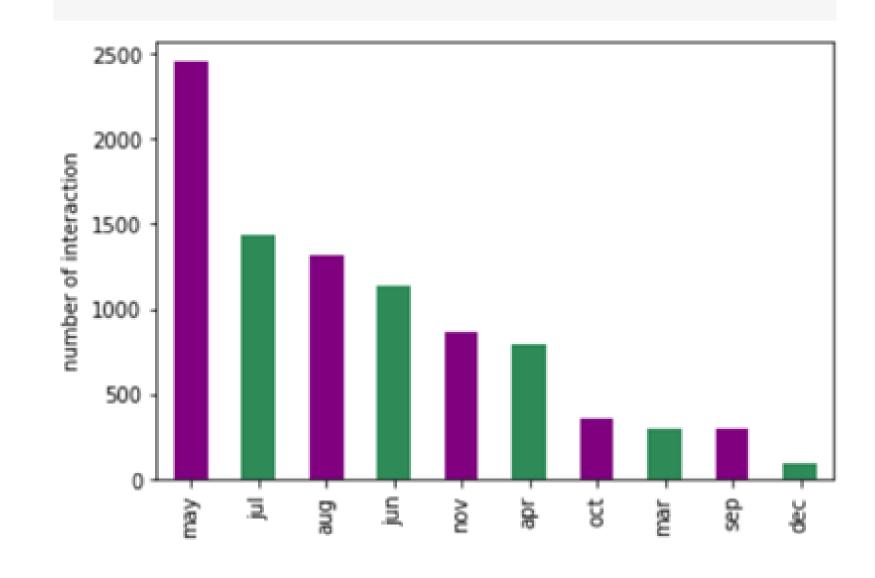
is the 'Marital' and 'Housing' columns associated to if the client will subscribe a term deposit





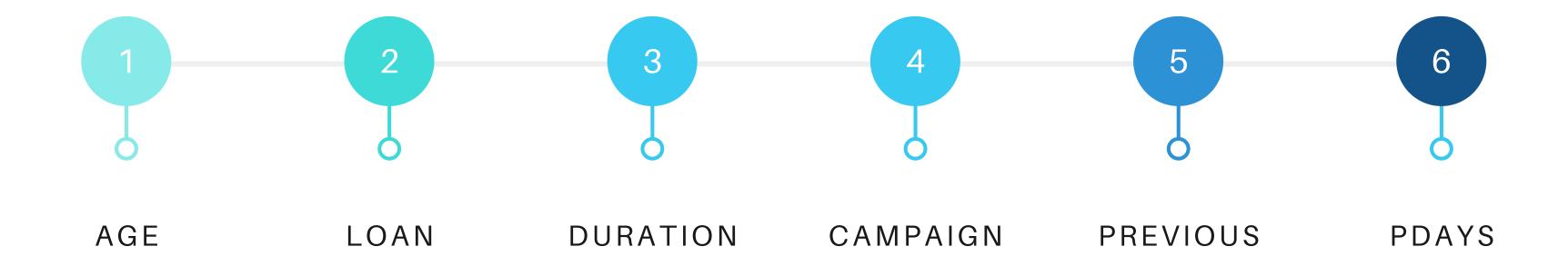
the Most month that has interactions in the data





Methodology

the initial parameters of the model





Confusion matrix Predicted label 964 404 196 1143

- 1000

800

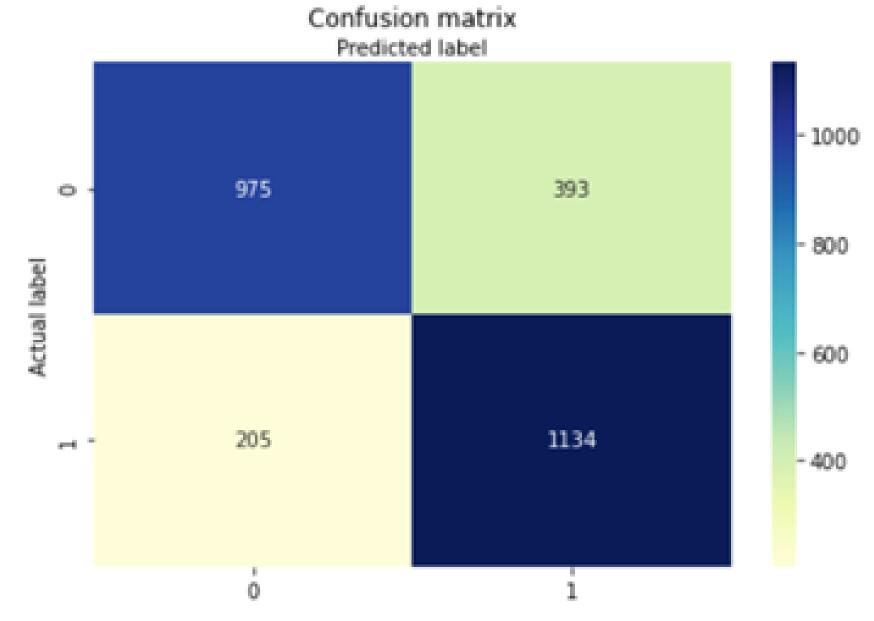
600

- 400

- 200



Logistic Regression



Accuracy: 0.780

visualization of error

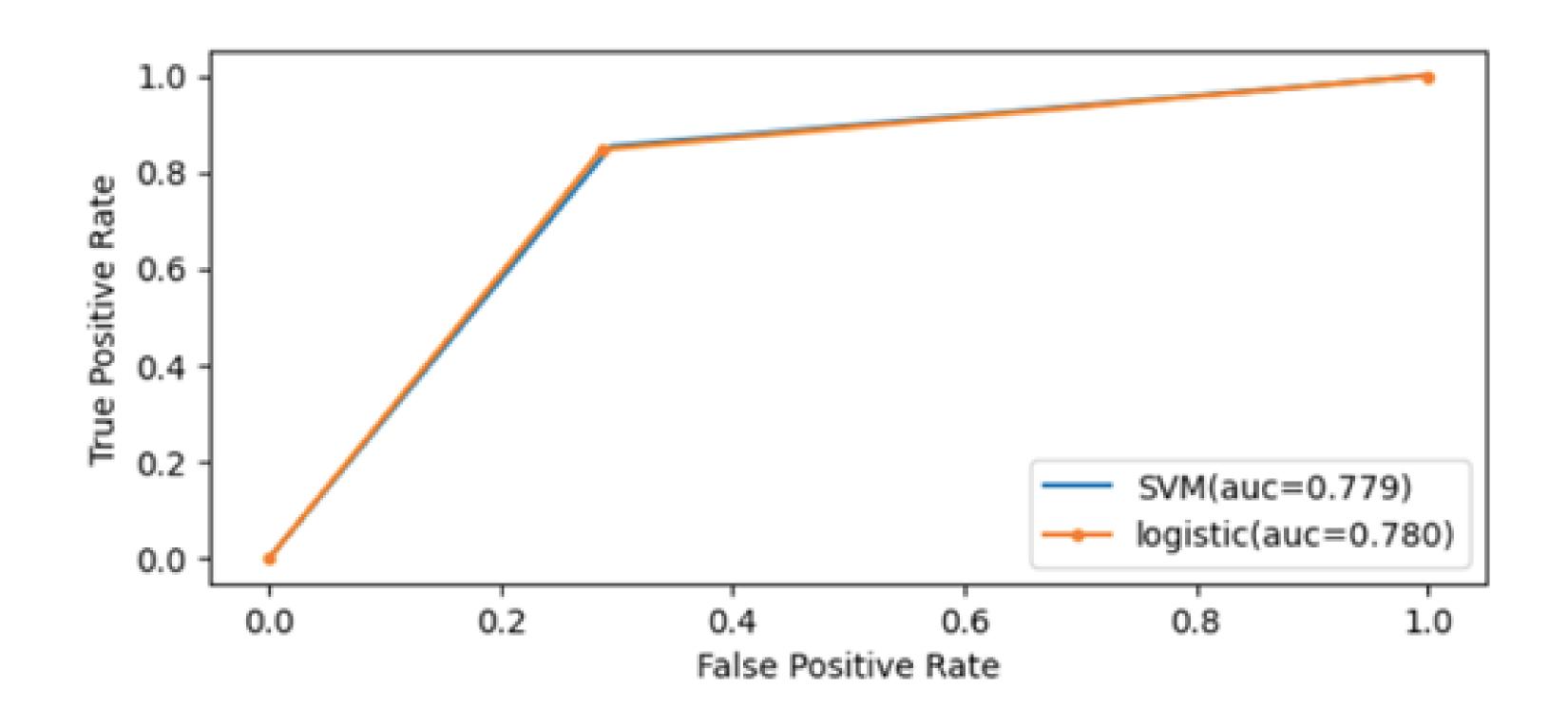
learning curve

Logistic Regression



Which technique is better?

Receiver Operating Characteristic



conclusion