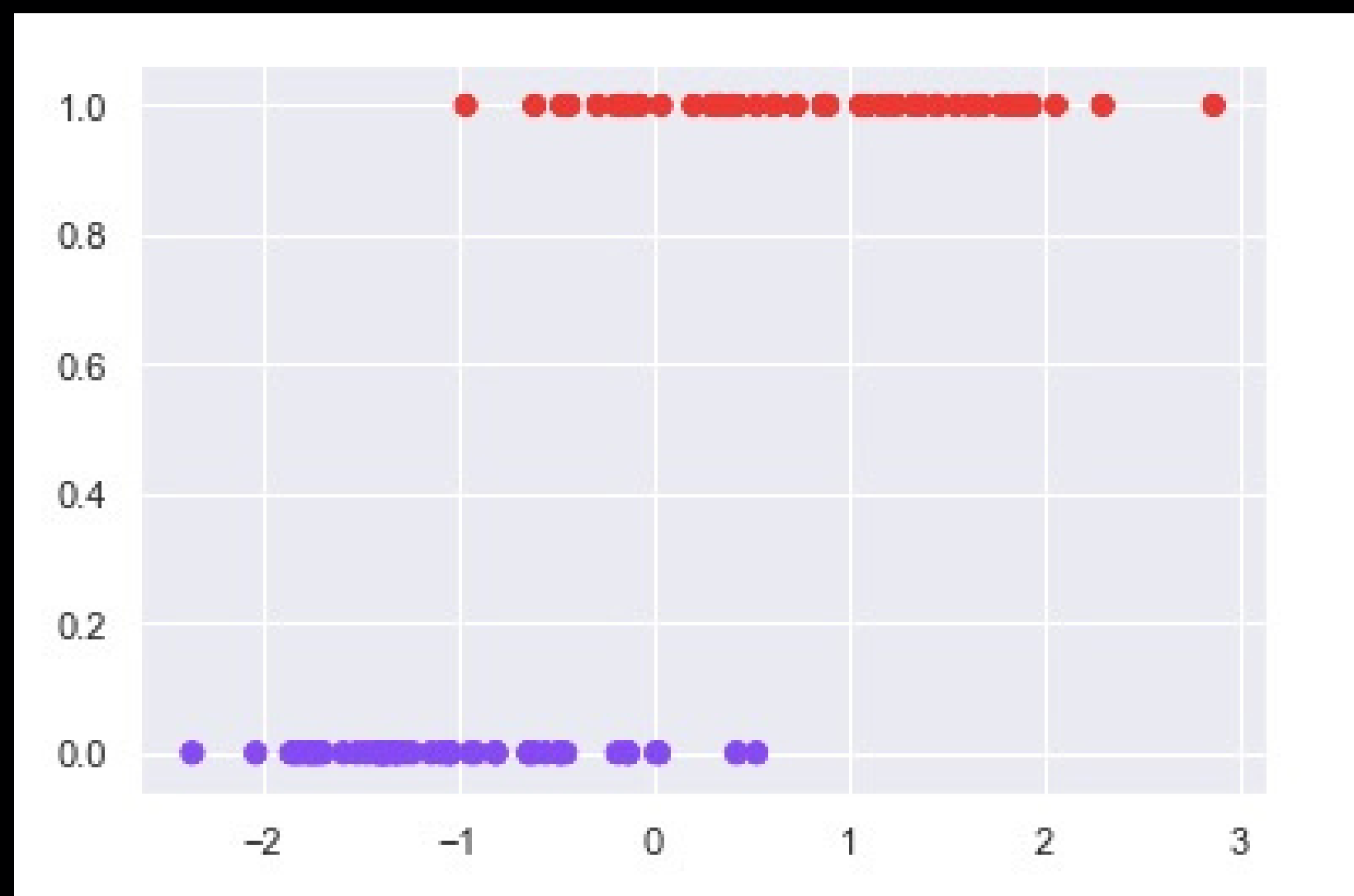




# LOGISTIC REGRESSION





haan maloom hai chal. Apne baap ko mat sikha





# WHAT IS LOGISTIC REGRESSION?

Logistic Regression is a game where you use information to predict something, like guessing the color of a ball based on its size and weight. You keep playing the game to figure out the best way to make your guesses.



# ACCURACY, PRECISION, RECALL

$$\text{Accuracy} = \frac{(\text{TP} + \text{TN})}{(\text{TP} + \text{FP} + \text{TN} + \text{FN})}$$

$$\begin{aligned}\text{Precision} &= \frac{\text{True Positive}}{\text{True Positive} + \text{False Positive}} \\ &= \frac{\text{True Positive}}{\text{Total Predicted Positive}}\end{aligned}$$

$$\begin{aligned}\text{Recall} &= \frac{\text{True Positive}}{\text{True Positive} + \text{False Negative}} \\ &= \frac{\text{True Positive}}{\text{Total Actual Positive}}\end{aligned}$$

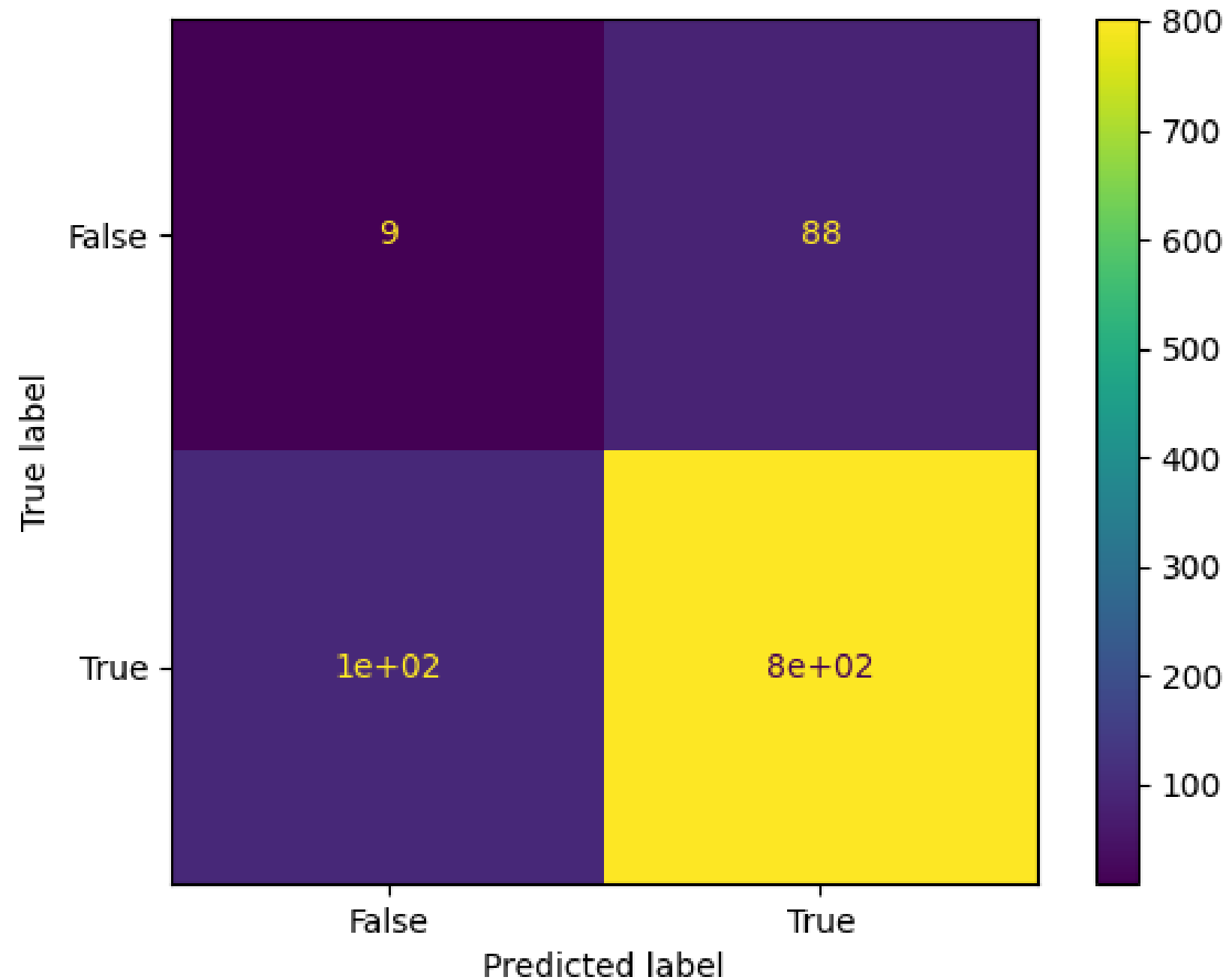




# WHAT IS CONFUSION MATRIX?

It is a table that is used in classification problems to assess where errors in the model were made. The rows represent the actual classes the outcomes should have been. While the columns represent the predictions we have made. Using this table it is easy to see which predictions are wrong.

# CONFUSION MATRIX?



YEAA JUST LIKE YOUR FUTURE :)