

Important Detail concepts.

→ Precision

Let's ex. we have Data set.

a. binary data set, where we have the numbers of 0 are 900 and numbers of 1 are 100.

so we will have total data points 1000.

0: 900
1: 100 } → 1000.

so this kind of Data set where our output has huge difference, we called it imbalanced Data Set.

Note: Always Remember one thing that in imbalanced dataset we can not apply direct accuracy. [accuracy formula].

Note: given Data set have 90% accuracy. so in the case we don't apply accuracy.

so for prevent that we use different P-Matrix, which is precision.

$$\rightarrow \text{Formula: Precision} = \frac{P}{P+FP}$$

Let's create another confusion matrix.

TP	FP
FN	TN

→ Precision: state that out of all the predicted results, how many are the correctly predicted.

Mtlb saari predicted results mai sai kitna correctly predicted result hai

Note: in confusion Matrix our aim is to TP ko increase kara aur TN ko increase karna.

baaki ko decrease karna.

	1	0
1	TP ↑	FP ↓
0	FN ↓	TN ↑

⇒ Recall:

$$\text{Recall} = \frac{TP}{TP + FN}$$

	1	0
1	TP ↑	FP
0	FN ↓	TN

Def → out of all the actual results, how many are the correctly predicted results.
so in this we how to reduce the False Negative