Tutorials

What is mode?

- **Definition**: The mode is the value that appears most frequently in a data set.
- **Example**: In the data set [1, 2, 2, 3, 4], the mode is 2 because it occurs more frequently than any other value.

What is median?

- In statistics, the median is a measure of central tendency that represents the middle value of a dataset when it is ordered from least to greatest. Here's a detailed explanation of the median:

1, 3, 3, **6**, 7, 8, 9

Median = 6

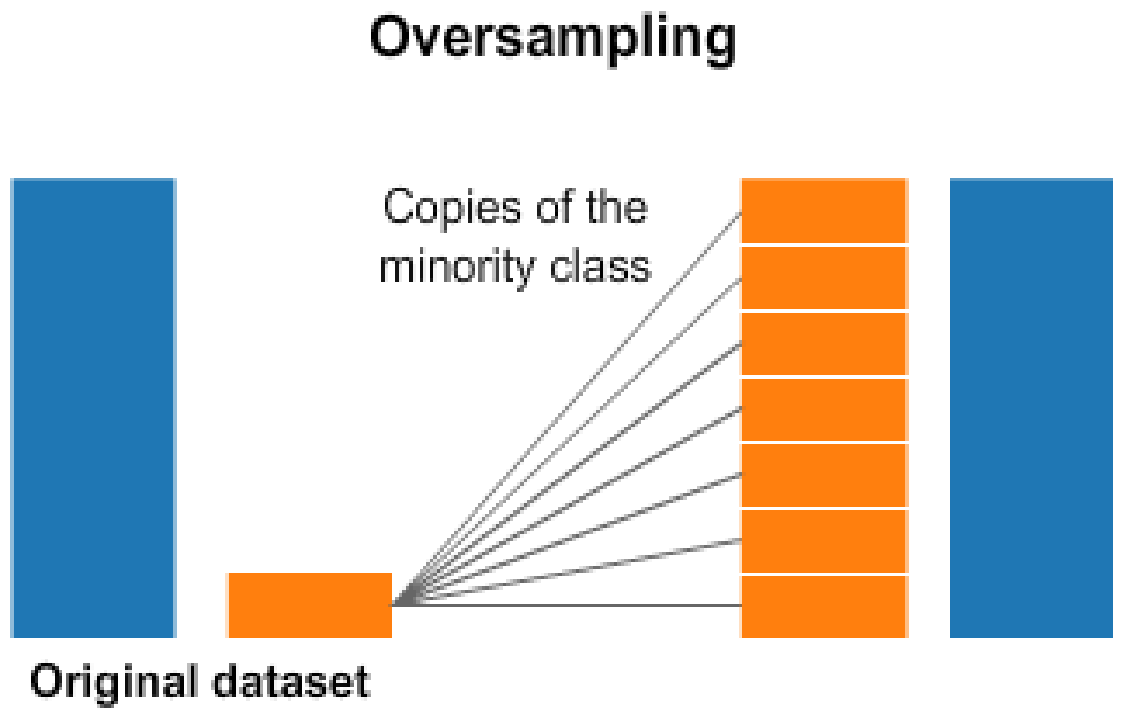
1, 2, 3, **4**, **5**, 6, 8, 9

Median = (4 + 5) ÷ 2

= 4.5

Data balancing?

- Oversampling in machine learning data balancing is a technique where minority class samples are duplicated to balance the class distribut

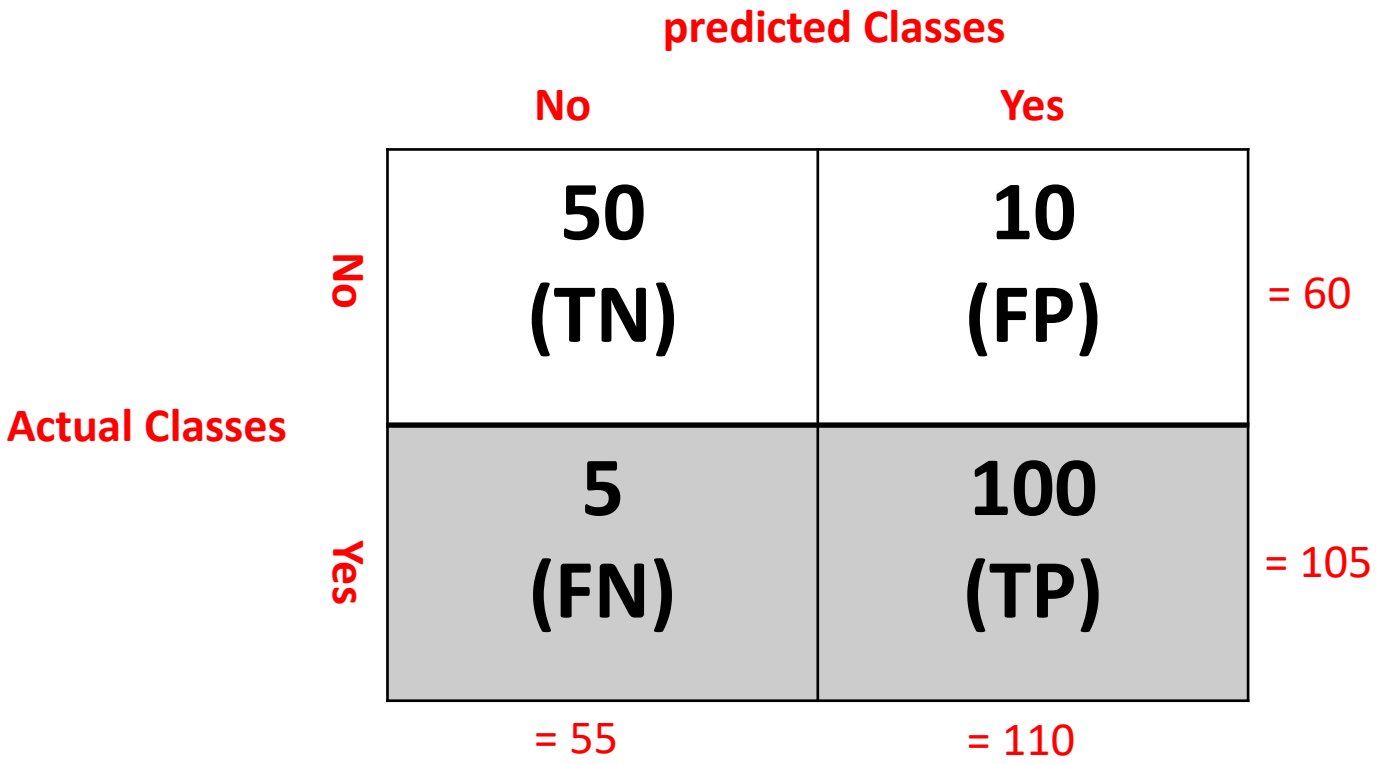


Scaling and Standard Scaler?

- Scaling in machine learning is the process of normalizing the range of independent variables or features of data. Standard Scaler standardizes features by removing the mean and scaling to unit variance.

$$z = \frac{x - \mu}{\sigma}$$

Confusion Matrix and classification report?



Precision = TP / predicted yes

100 / 110 = 0.64

Recall = TP / actual yes

100 / 105 = 0.95

Error rate = FP + FN / total

(10 + 5) / 165 = 0.09

Accuracy= (TP + TN) / total

(100 + 50) / 165 = 0.91