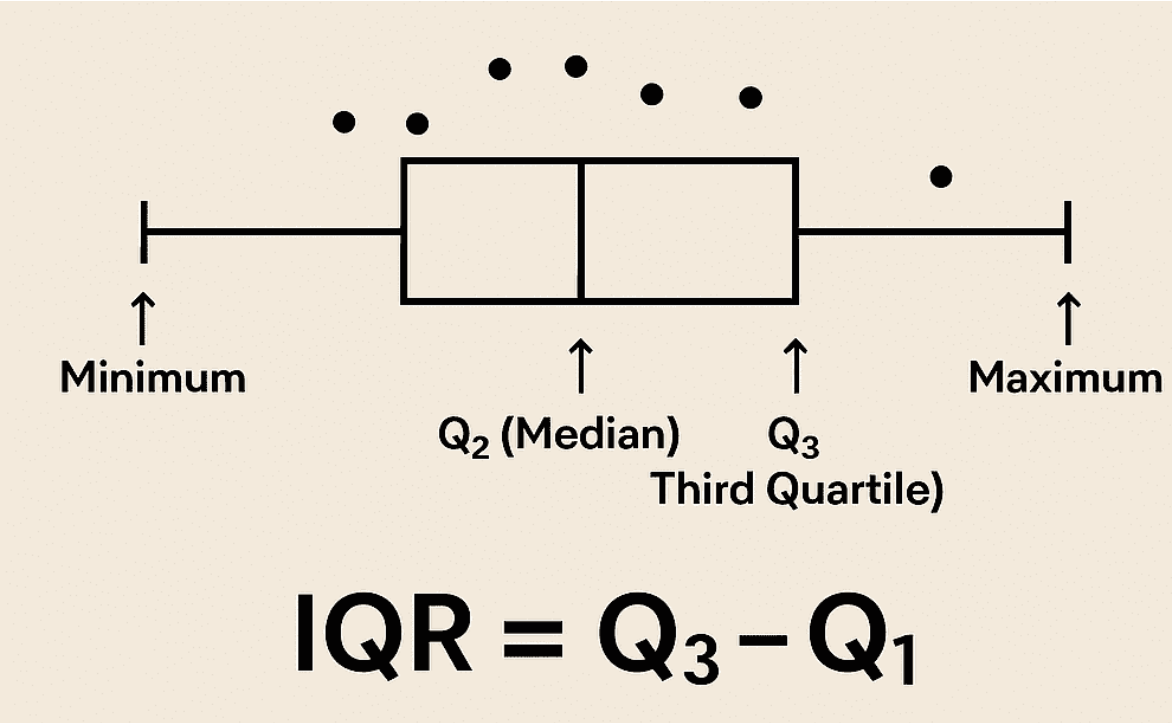
InterQuartile Range

The **quartiles** of a ranked set of data values are three points that divide the data into exactly four equal parts, each part comprising quarter data.

Q1 = middle number between smallest value and the median
Q2 = median of the data
Q3 = middle number between median and the highest value

The InterQuartile tells where the majority of the data lies and identifies outliers in a data set.



Outlier Detection : The IQR method follows 1.5 as its scale to detect outliers as it closely follows Gaussian distribution.

$$\text{Lower Outlier} = Q1 - (1.5 \times IQR)$$

$$\text{Higher Outlier} = Q3 + (1.5 \times IQR)$$

The method dictates that any data point that's 1.5 points below the lower bound quartile or above the upper bound quartile is an outlier.