Feature Scaling

1. Standardization: -

It is scaling technique in which the variable is compared by putting all the variables on the same scale. It is done by transforming the features by subtracting from the mean and dividing by standard deviation. This process is also known as **“Z-Score”**

z = x - mean(x) / Std(x)

1. Normalization: -

It is a scaling technique used to reduce redundancy in which the values are shifted and scaled in a range of 0 to 1.

Normalization is used to remove the unwanted characteristics from the dataset and it is useful only when there are no outliers as it can not handle them.

**Min-Max Scalar:**

Norm\_x = x – min(x)/max(x) – min(x)

**Normalizer:**

X\_myu = x – mean(x)/max(x) – min(x)