***DATA TRANSFORMATION***

Data transformation refers to transform data from original form to a form which is easy to use(transformed or modified form).

Transformer is that on the basis of which we transform data.

After transformation the scale of data should be same

For example: if data is from 1 to 80 and we want to bring it at small scale we can bring it from 0.1 to 8 but in both the distance will be same.

Standardization:

Standardization means you use an equation on your data and it is standardized.

There are three type of scalar.

1. Standard scalar: It scales data between -3 and +3
2. Min-Max scalar: It scales data from 0 to 1
3. Max-Abs Scalar: It scales data from -1 to 1

Standard scaling is also known as z-score

Before using scalar we should check whether the ML algorithm that we are going to use supports negative values or not if yes then we can use standard and max-abs scalar other we will use min-max scalar.

Which scaler is to use: It depends upon which type of algorithm you work with. If your algorithm supports negative values then standard scaler is best otherwise minmax scaler is best.

The standard scaling is also known as standardization.

***Normal data distribution(best data distribution)***

