BOOSTING ALGORITHM - REGRESSION

Ada Boost

XG Boosting

LG Boosting

ADABOOST - SEQUENTIAL LEARNING

- An AdaBoost regressor is a **meta-estimator** that begins by **fitting** a **regressor** on the **original dataset** and then fits **additional copies** of **the regressor** on the **same dataset** but where the **weights** of **instances are adjusted** according to the **error** of the **current prediction**.

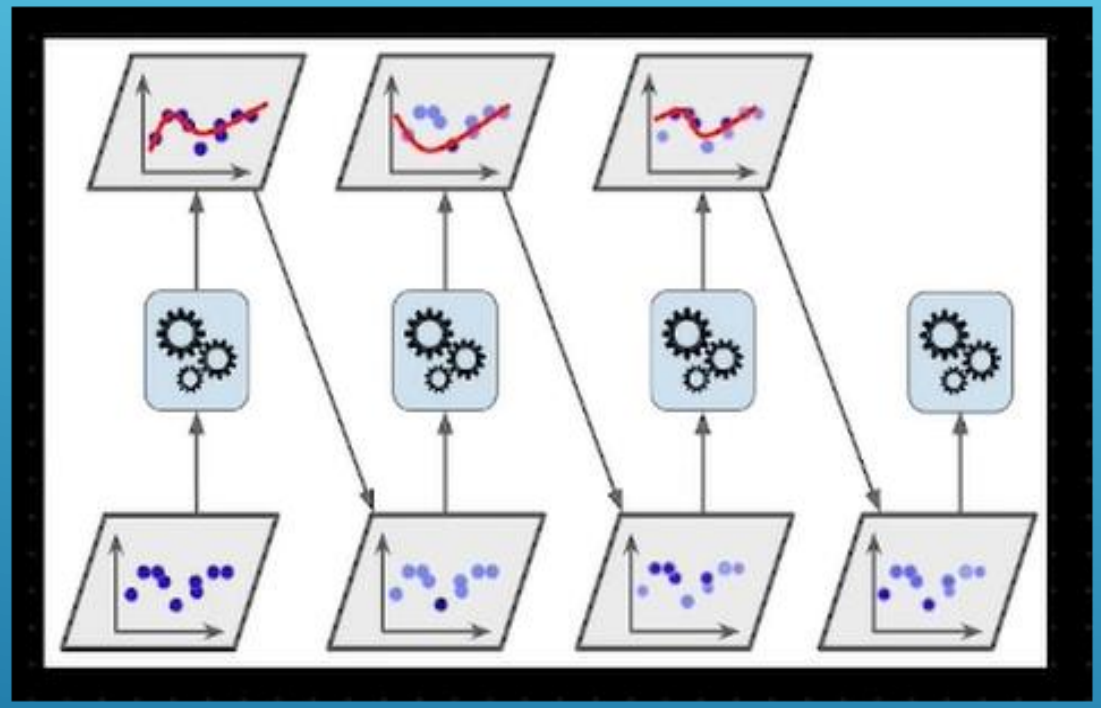
Purpose of AdaBoost

- improve binary classification performance
- improves prediction accuracy by combining multiple "weak" classifiers into a strong classifier
- focusing on misclassified data points in each iteration

Applications of AdaBoost

- face detection
- object recognition
- text classification
- AdaBoost can also be used in other areas of machine learning, such as regression and clustering

Misclassified data points transfer into another model



Final model – strong learner (Combination of various week learners)