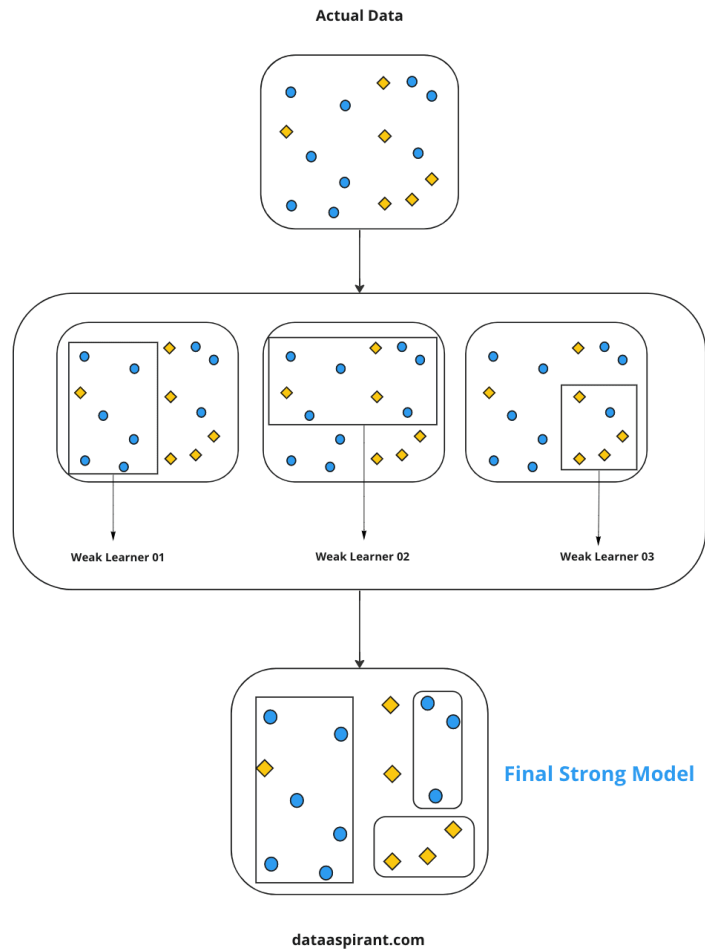


Ada Boost Regressor

What is AdaBoostRegressor

- AdaBoostRegressor is a machine learning algorithm that is used for regression problems.
- It is an ensemble method that combines multiple weak models (i.e., models with low predictive power) to create a strong model with high predictive power.
- This can be achieved by adjusting the weights to each training instance based on its error of the current prediction.

How Adaboost Algorithm Works

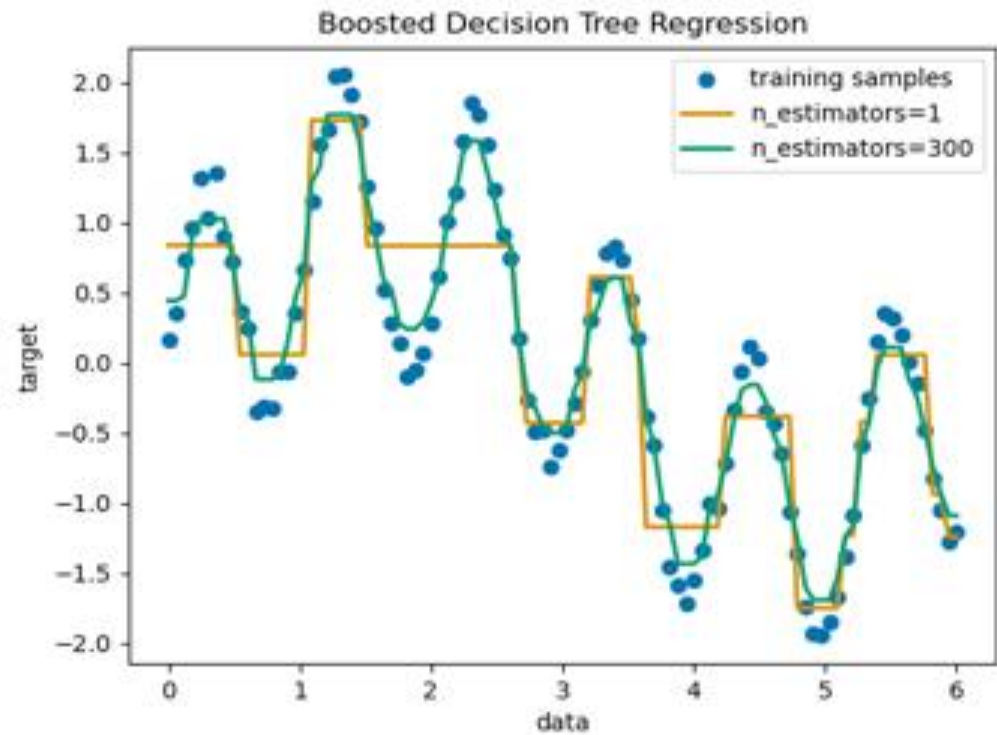


Steps In Adaboost Algorithm?



1. Initialize the weights of the training
2. Train a weak classifier
3. Evaluate the performance of the weak classifier
4. Update the weights
5. Repeat steps 2-4
6. Weak classifiers to strong model

Example - Decision Tree Regression with AdaBoost



Advantage of AdaBoostRegressor

- Often achieves high accuracy by combining multiple weak models.
- The biggest advantage of this algorithm is its ability to handle noisy data and outliers.
- It is also less prone to overfitting than other algorithms such as Support Vector Machines (SVM).