

AdaBoost(Adaptive boosting)

- Adaptive boosting or AdaBoost is one of the simplest boosting algorithms.
- Usually, decision trees are used for modelling.
- Multiple sequential models are created, each correcting the errors from the last model.
- AdaBoost assigns weights to the observations which are incorrectly predicted and the subsequent model works to predict these values correctly.

AdaBoost(Adaptive boosting)

- **steps of AdaBoost**
- Initially, all observations in the dataset are given equal weights.
- A model is built on a subset of data.
- Using this model, predictions are made on the whole dataset.
- Errors are calculated by comparing the predictions and actual values.
- While creating the next model, higher weights are given to the data points which were predicted incorrectly.
- Weights can be determined using the error value. For instance, higher the error more is the weight assigned to the observation.
- This process is repeated until the error function does not change, or the maximum limit of the number of estimators is reached.