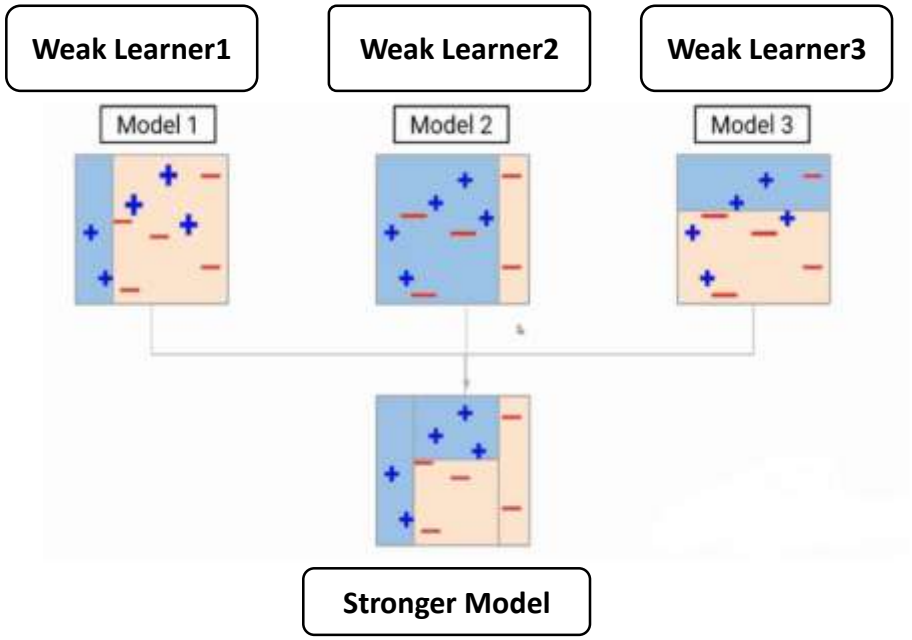
AdaBoost Algorithm

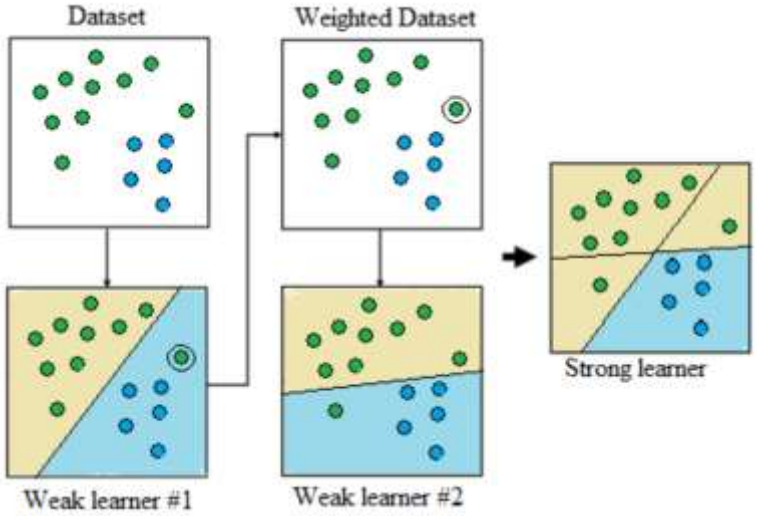
Ada Boost (or) Adaptive Boosting



- AdaBoost (Adaptive Boosting) is an ensemble learning method that combines multiple **weak learners** to create a **stronger model**.
- AdaBoost algorithm works by training weak learners in a sequence and focusing on correcting mistakes made in earlier steps

How Does AdaBoost Work?

- The AdaBoost algorithm works by training **weak learners** in a **sequence** and focusing on **correcting mistakes** made in **earlier steps.**



simple breakdown of the process:

AdaBoost Algorithm Parameters

- Number of Weak Learners
- Base Estimator
- Learning Rate
- Loss Function

Advantages of AdaBoost

- ❑ Improved Accuracy
- ❑ Adaptability
- ❑ Ease of Implementation
- ❑ Handles Imbalanced Datasets

Disadvantages of AdaBoost

- Sensitive to Noisy Data
- Computationally Intensive
- Overfitting
- Limited Flexibility with Weak Learners