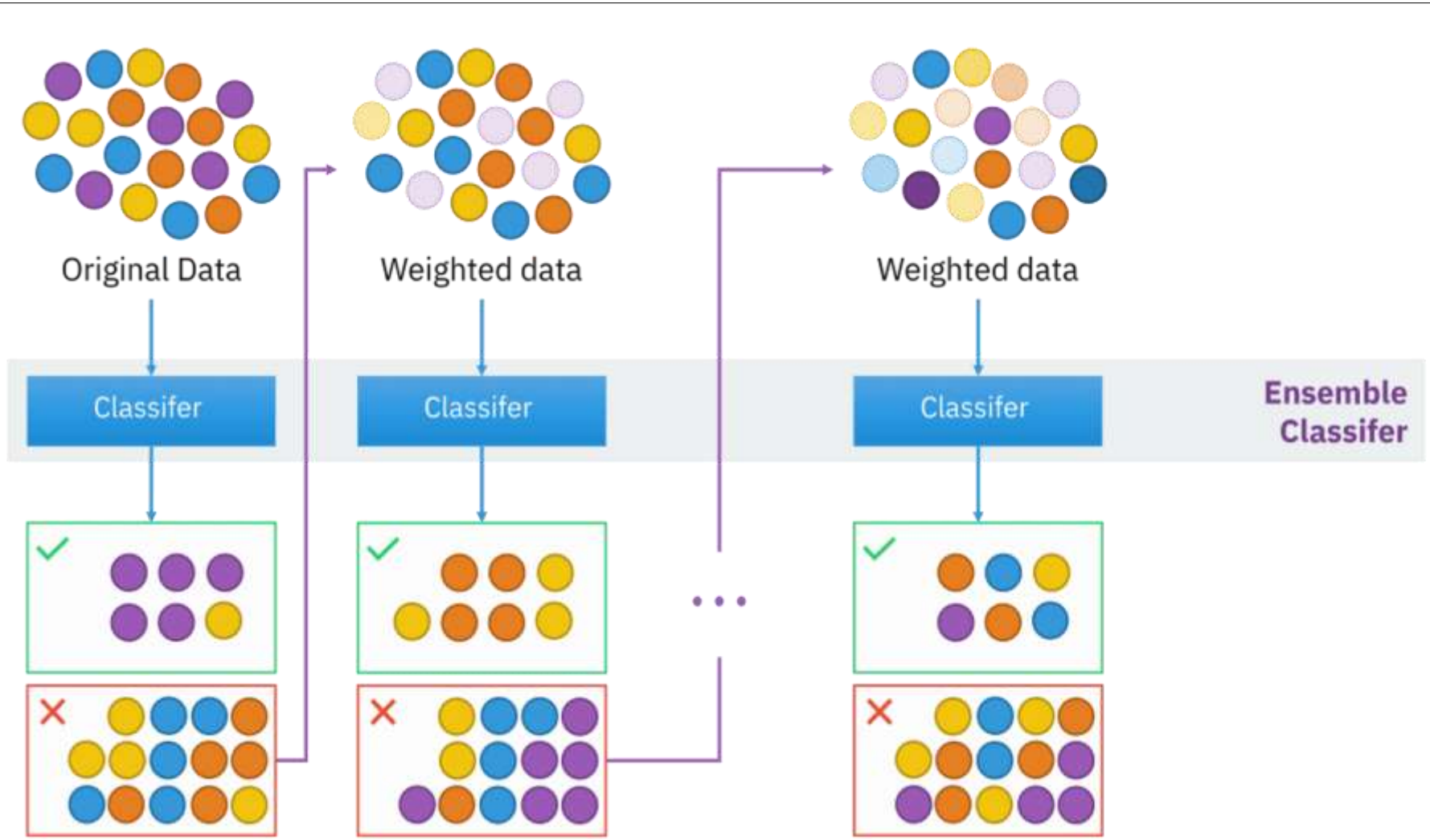
ADA BOOST ALGORITHM

What is ADA Boost

•Adaboost is short for “ADOPTIVE BOOSTING”
•Adaboost is a meta-algorithm
•Can be used with other learning algorithm to improve their performance.
•It is a supervised learning algorithm that is used to classify data by combining multiple weak or base learners (e.g., decision trees) into a strong learner.

Key Concepts of ADABOOST:
Weak Learner: A model that performs slightly better than random guessing (commonly a decision stump — a one-level decision tree).
Boosting: An ensemble technique that combines multiple weak learners in sequence, where each learner focuses more on the mistakes of the previous ones.
Adaptive: It "adapts" by assigning more weight to misclassified instances in each iteration.

How Adaboost works



Use cases of Adaboost:

Adaboost are mainly used in following fields:

- Spam detection
- Face recognition
- Text classification
- Medical diagnosis

Advantages and Disadvantages of Adaboost