Types of Machine Learning

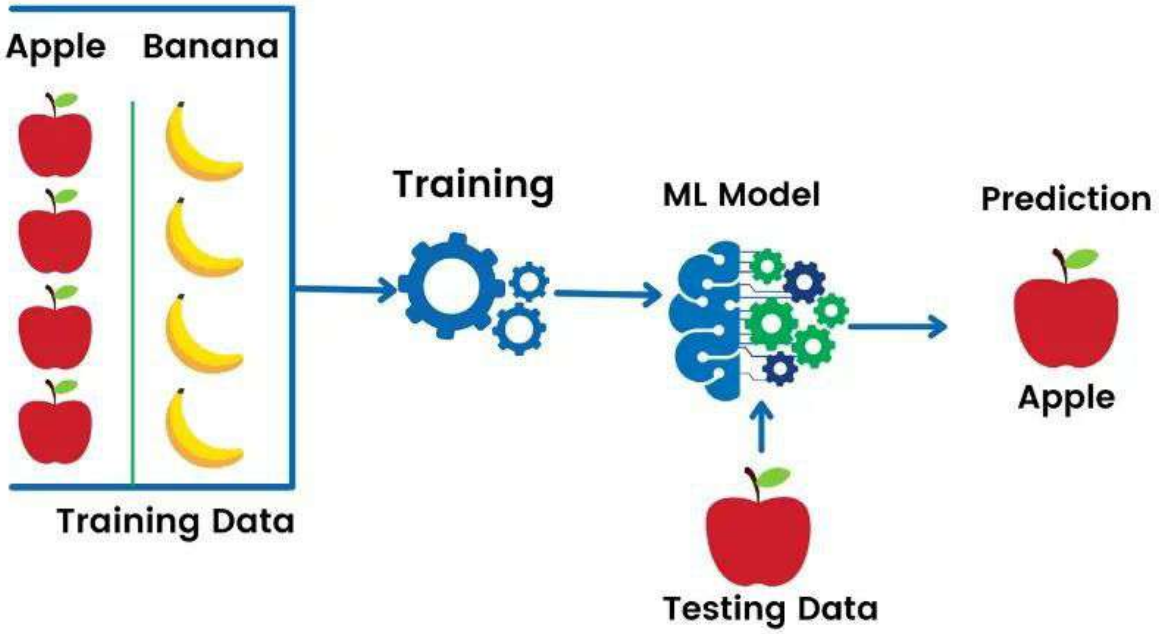
@dynamic.coding

Supervised Machine Learning:

Supervised Learning algorithm are used when the output is classified or labeled.

This algorithm learns from the past data that is inputted, called training data, runs its analysis and uses this analysis to predict future events for any new data within the known classification.

Supervised Learning Example:



Applications:

weather prediction, sales forecasting, stock price analysis.

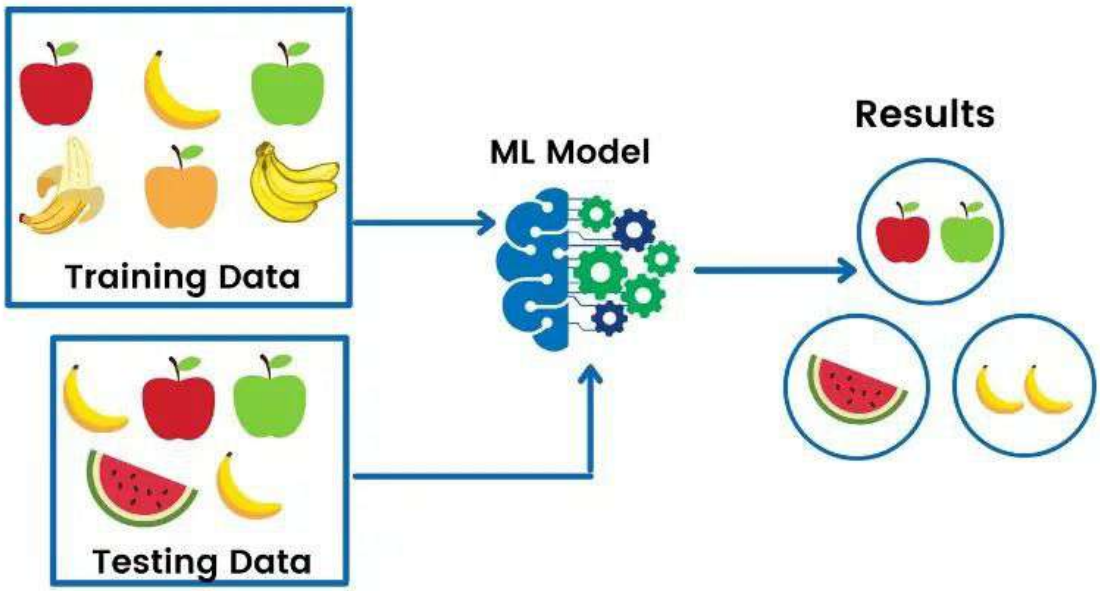
Unsupervised Machine Learning:

Unsupervised learning is a type of machine learning that uses unlabeled data to train machines.

Unlabeled data doesn't have a fixed output variable.

The model learns from the data, discovers the patterns and features in the data, and returns the output.

Unsupervised Learning Example:



Applications:

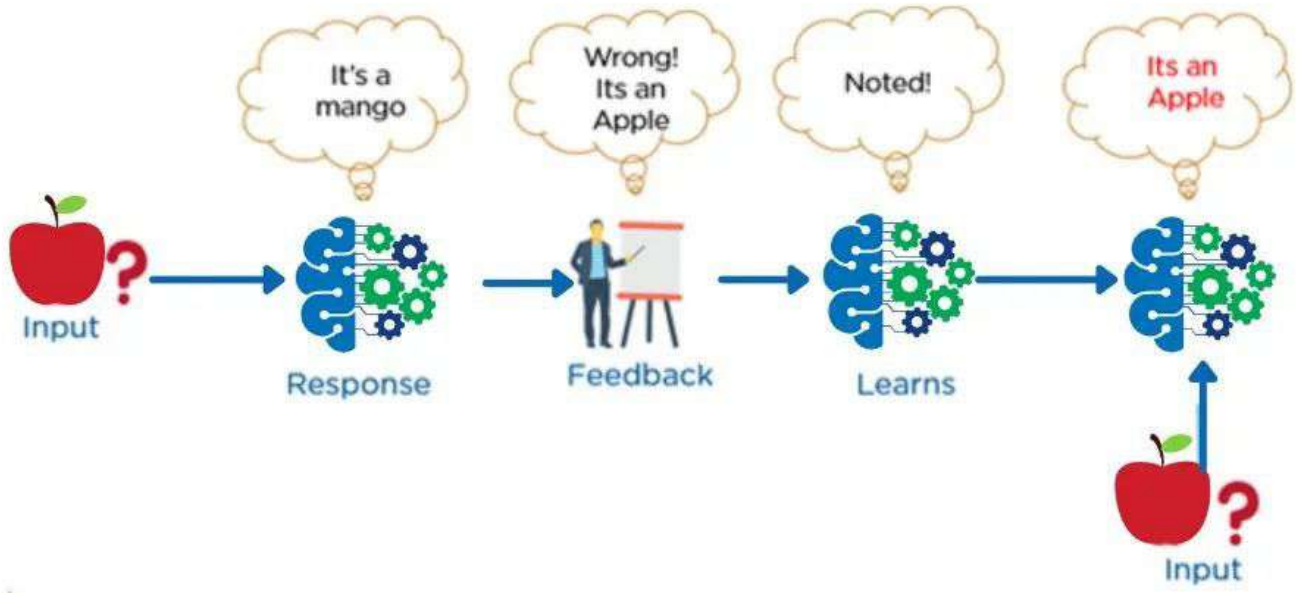
customer segmentation, Market Basket Analysis.

Reinforcement Machine Learning:

Reinforcement learning works on a feedback-based process, in which an agent (A software component) automatically explore its surrounding by hitting & trail, taking action, learning from experiences, and improving its performance.

Agent gets rewarded for each good action and get punished for each bad action; hence the goal of reinforcement learning agent is to maximize the rewards.

Reinforcement Learning Example:



Applications:

it is used in the gaming industries to build games. It is also used to train robots to do human tasks.