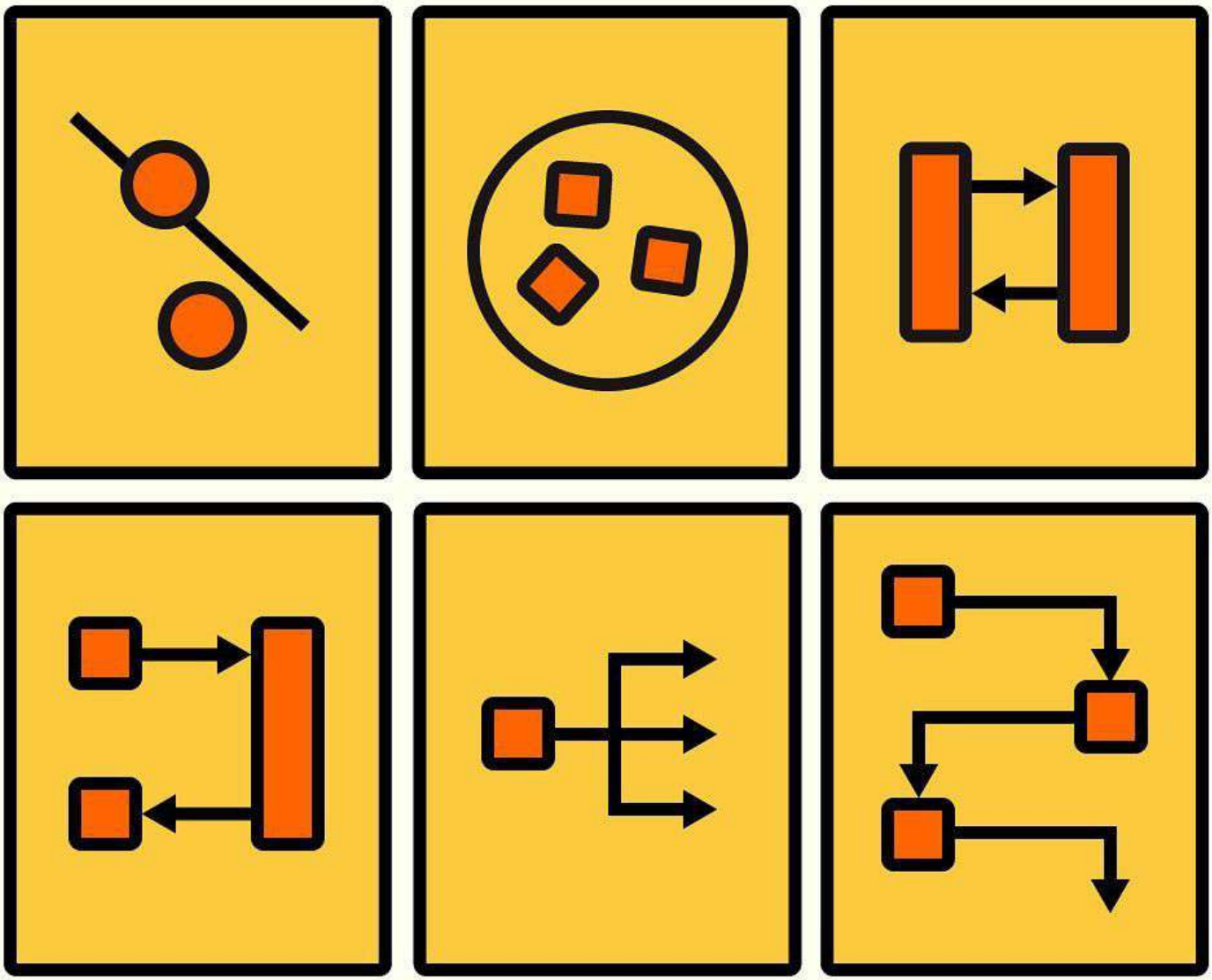
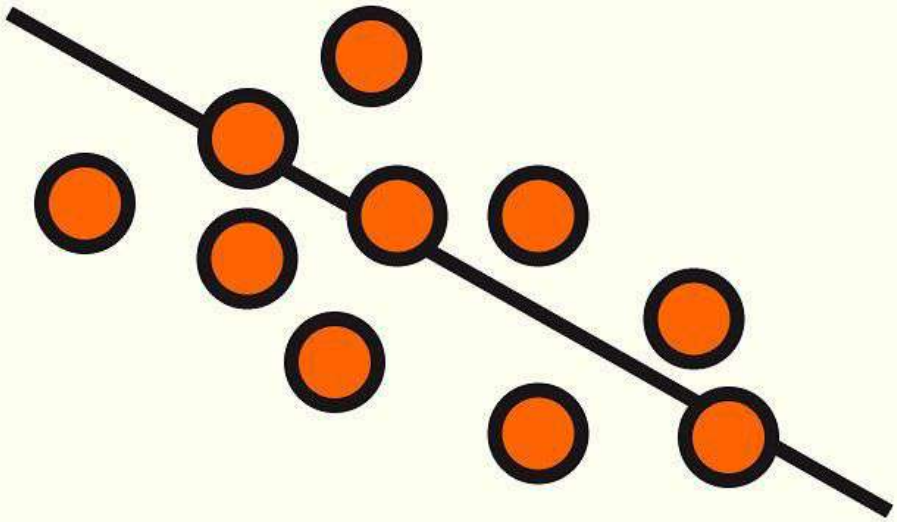
TYPE OF MACHINE LEANRING

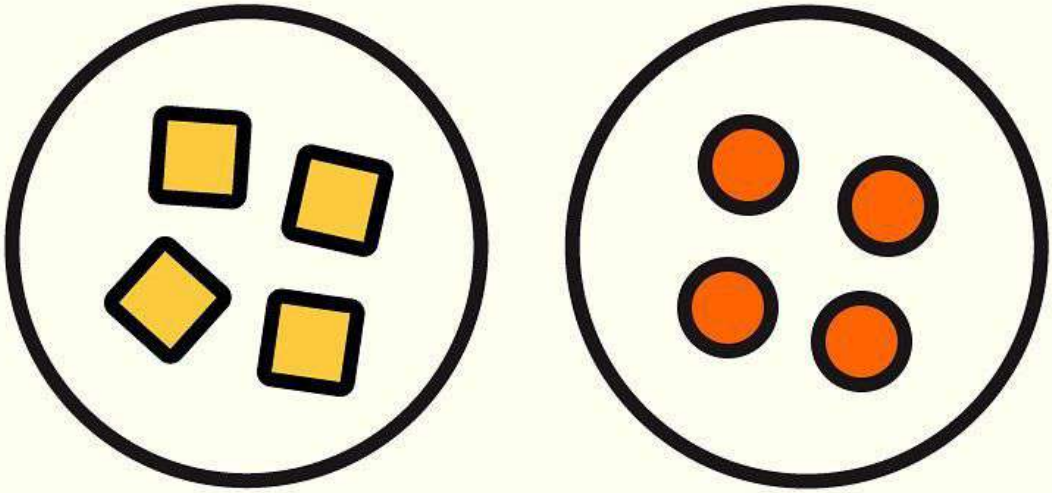


ML Concept



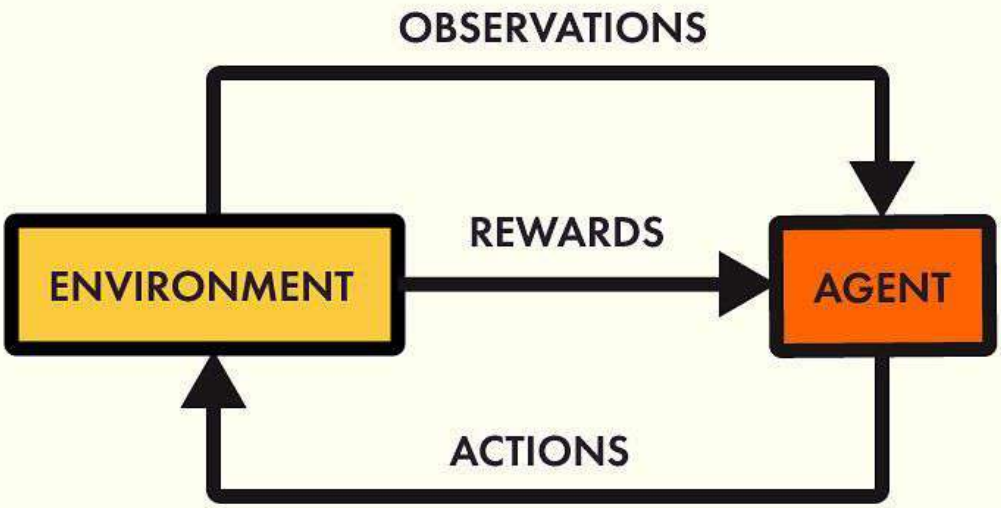
Supervised Learning

Supervised learning model is trained using data which is already tagged with the correct answer. It can be further grouped into regression and classification.



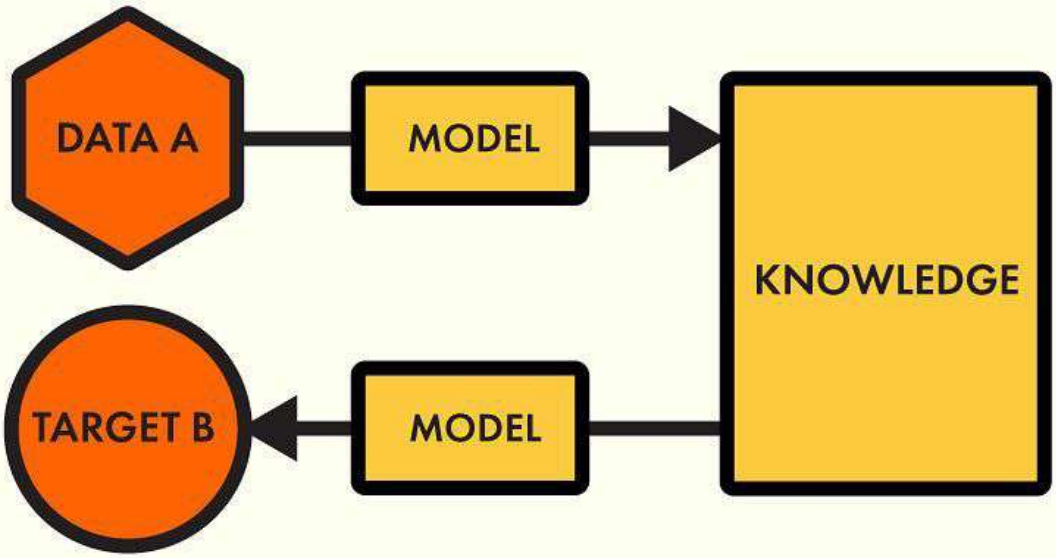
Unsupervised Learning

Unsupervised learning model is trained using data that is neither classified nor labeled and allowing the model to act on that information without guidance. Clustering, self-supervised and auto encoding are all unsupervised learning methods.



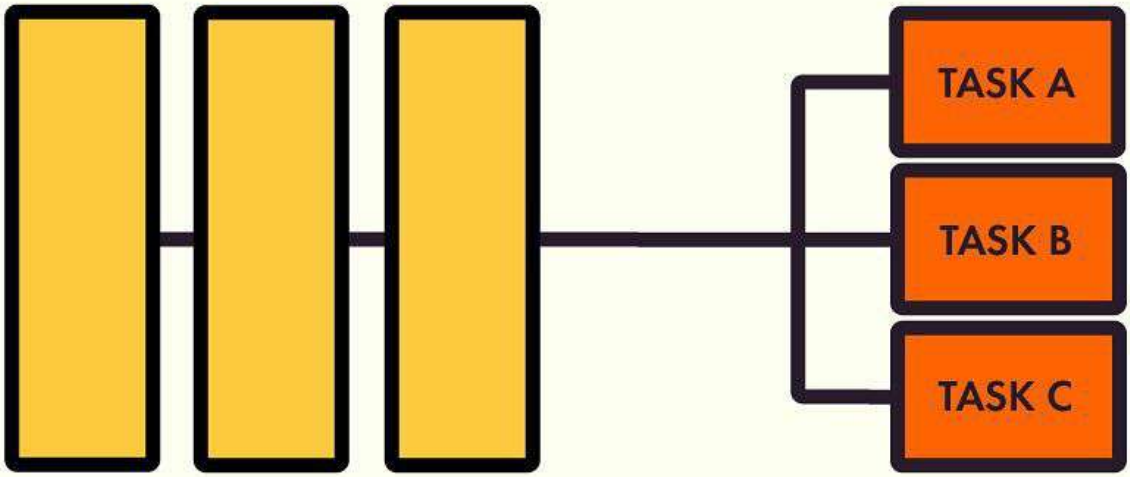
Reinforcement Learning

Reinforcement Learning is learning by interacting with an environment. It enables an agent to learn in an interactive environment by trial and error using feedback from its own actions and experiences.



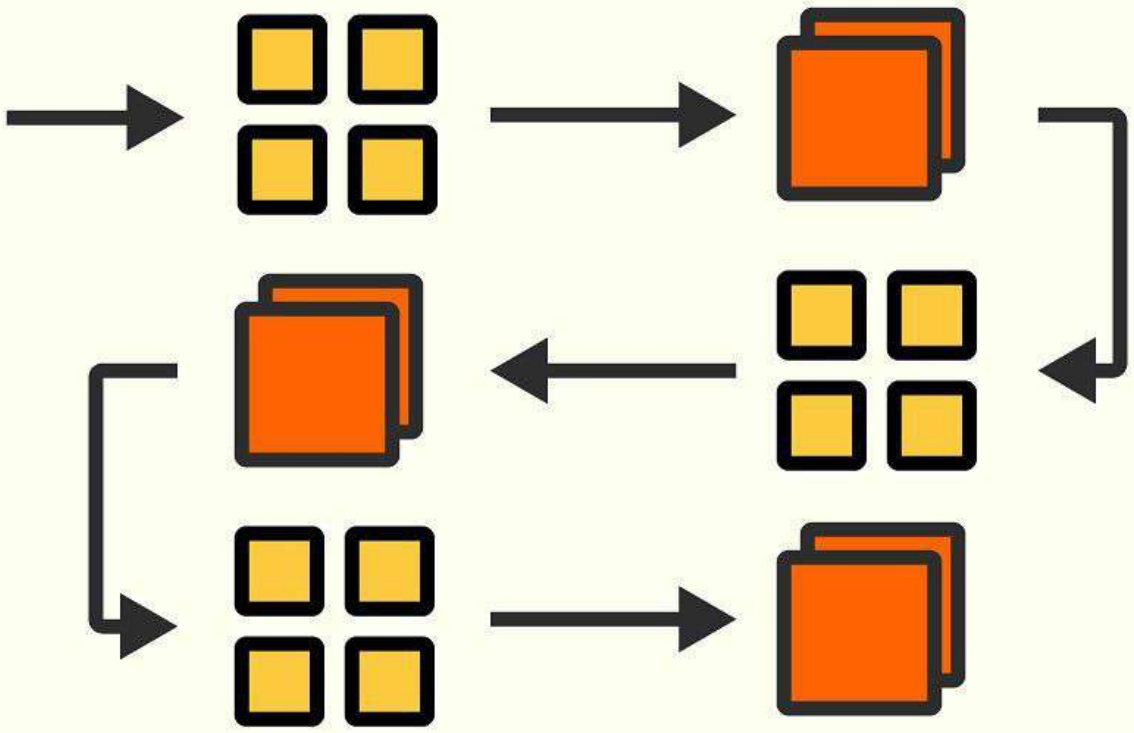
Transfer Learning

Transfer Learning enables us to utilize knowledge from previous learned tasks and apply them to newer, related ones. For example, knowledge gained while learning to recognize cats can be used to some extent to recognize dogs.



Multi-task Learning

Multi-Task learning aims to solve multiple different tasks at the same time, by taking advantage of the similarities between different tasks, using a shared representation.



Ensemble Learning

Ensemble Learning combines the predictions from multiple models to improve the overall performance. Bagging and Boosting are the most common ensemble techniques.