Artificial Intelligence and Machine Learning Essential Program | March 2021

Assignment 1:

1. Machine learning is a powerful concept that enables a system to learn from data. The need for machine learning is to use the data itself to drive decisions instead of using programming logic, rules, or code to make decisions. For example, machine learning can automate processes or tasks by learning specific patterns from the data such as predicting whether a stock will rise or fall today.

Assignment 2:

1. Deep learning is a subset of machine learning. Deep learning is involved in algorithms related to artificial intelligence and inspired by the structure of a human brain. In terms of activation functions, it is designed to help the network learn complex patterns in the data.

2. Supervised learning is having a full set of labeled data while training an algorithm. This can be useful to identify the input data as a member of a particular class or group. For example, the photo can be labeled as koala. The algorithm will analyze how accurately it can classify new images. On the other hand, unsupervised learning is a data set without explicit instructions on what to do with it. The data set does not have a specific outcome or correct answer. Therefore, it is difficult to measure the accuracy of an algorithm trained with unsupervised learning.