ML Assignment 2

Q1) learning similar to human beings is human learning. This involves thinking, reasoning etc.

Q2) supervised, unsupervised and reinforcement learning in machine sis equivalent to human learning of such kinds like classification, labelling, clustering, rewards and punishments etc.

Q3) machine learning is where machines learn. Machines try to reduce losses and generalize relations.

Q4) reward is given for desirable behavior and penalty is given for wrong behavior.

Q5) learning is done through search. Example, searching for relationships in data.

Q6) classification, regression, clustering, reinforcement etc are various goals of machine learning. These are similar to such human learning.

Q7) I predict the monthly expenditure based on previous expenditures like regression. I classify and give labels to most of the objects in daily use around me. I cluster the jobs into various profiles to apply for a suitable job.

Q8) abstraction highlights only important details. For example, portrait mode in mobiles highlights only nearby object.

Q9) generalization means generalizing patterns in data. This is very important to be able to predict using data. Classification classifies data into various labels. Regression only gives a value based on previous generalization of data and doesn’t classify between data.

Q10) clustering separates data into various groups based on similarity.

Q11) human supervision is required for certain tasks like classification where labels have to be provided, hyperparameter tuning has to be done etc. human supervision is not required in tasks like clustering where data is clustered based on similarity and doesn’t need any labelling.