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Part - B

Q.2] Machine learning is a form of study that aims to improve the learning automatically through experience. There are primarily 3 types of learning :-

(I) Supervised learning :-
- It is a method in which we teach the machine using labelled data.
- It is categorised further as classification or regression.
- Common algorithms for regression are linear & logistic regression and for classi- fication KNN, decision tree, SVM and so on.
- Eg :- Predicting the temperature in a day or week [regression]; classifying email as spam or not [classification].

(II) Unsupervised learning :-
- It is a method of learning in which the machine is trained on & unlabelled data without any guidance.
- Common algorithms used are K-means clustering and apriori algorithm.
- Eg :- Market basket analysis, association rule mining and so on.

(111) Reinforcement learning :-
- In this type of learning the agent interacts with its environment by producing actions and discovers errors or rewards.
- Algorithms used are Q-learning, SARSA.
- Eg:- ① Training a robot to play chess like Deep Blue.
    ② Robots that do industrial work.
    ③ AI game algorithms.