* **Machine Learning :-** Machine Learning is a subset of Artificial Intelligence which provide machines ability to learn automatically and improve from experience without being explicitly program.

Machine Learning is a field of static that gifts computer capability to learn without being program.

There are three type of Machine Learning :-

1) Supervised Machine Learning

2) Unsupervised Machine Learning

3) Reinforcement Machine Learning

* **Supervised Machine Learning :-** Supervised learning is a method in which we teach the machine using label data.
* It has less computational complexity.
* It is accurate and reliable.
* In supervised learning it is not possible to learn larger and more complex models.
* For example, optical character recognition etc.
* **Unsupervised Learning :-** Unsupervised Learning is a method in which we teach a model on unlabeled data.
* **Reinforcement Learning :-** In Reinforcement Learning, A model is trained to make decisions based on errors and trials.

**Regression And Classification**

* **Regression:-** Regression is a statistical method used to model relationship between a dependent variable(target) and one or more independent variables(predictor).

The goal of the regression analysis is to identify the strength of the relationship between the variables and to use that relationship to make predictions about the dependent variables based on the values of independent variable(s).

* **Classification:-** **Classification teaches a machine to sort things into categories. It learns by looking at examples with labels (like emails marked “spam” or “not spam”). After learning, it can decide which category new items belong to, like identifying if a new email is spam or not.**