SUPERVISED LEARNING:

Supervised learning also known as supervised machine learning is a subcategory of machine learning and artificial intelligence. It is defined by its use of labelled datasets to train algorithms that to classify data or predict outcomes accurately.

Types Of Supervised Learning:

There are two types of supervised learning techniques

- **Regression**
- **Classification.**

UNSUPERVISED LEARNING:

Unsupervised learning is a type of algorithm that learns patterns from through mimicry, which is an important mode of learning in people, the machine is forced to build a concise representation of its world and then generate imaginative content from it.

Types Of Unsupervised Learning:

- **Clustering**
- **Association.**

K- MEANS CLUSTERING

- **It is a Unsupervised learning pattern.**
- **Clustering means it divides the data in clustering pattern.**
  K- mean clustering
  i. **It divides the data.**
  ii. **The dividing depends on the centroids.**

K=No•/• of centroids

- **In the clustering, only x value there is no Y values.**
- **Elbow Chart –**

By using their chart , we find the k- value then, the centroids will be marked.

CLUSTERING:

- **The data is clustered into one of the multiple clusters where the arrangement of data items is relies**
  on the similarities between them.

CLASSIFICATION:

- **The data is classified into one of the numerous defined definite classes.**
- **Labelled data is provided.**

LOGISTIC REGRESSION:

- **It is the regression analysis to contact the dependent variable output data is categorical are binary.**
- **It is the predictive analysis.**

Types :

- **Binary logistics regression.**
- **Ordinal logistics regression.**
- **Nominal logistics regression.**
- **Poisson logistics regression.**