15. What is Cluster Analysis and its Type?

=> In Cluster Analysis main task is to find out data point which are similar and keep them in one group, object within a group are related with one another and different or unrelated with data point in other group. The better the similarity within a group and the greater the difference between groups, better or more good the clustering.

1. Partitioning clustering
2. Density based clustering
3. Distribution model based clustering
4. Hierarchical clustering
5. Fuzzy Clustering

14. How is Cluster Quality Measure?

=> To measure the Cluster Quality we use the Silhouette method, we can also say this is clustering hyper parameter tuning method. In this value is between -1 to +1, if the value toward -1 our model is performing bad and if the value towards +1 our model is performing good.

13. How is cluster analysis calculated?

=> T0 calculated the cluster analysis, one of the famous method is to calculate the distance between the data points.

1.   Euclidean Distance-> Euclidean distance works on the formula on Pythagorean theorem. It is used where the data point are not in block or patterns.

2.   Manhattan Distance-> Manhattan Distance is used where the data points is in block and patterns.