

MACHINE LEARNING

Answer 1:- B) 4

Answer 2:- D) 1,2 & 4

Answer 3:- d) formulating the clustering problem

Answer 4:- a) Euclidean distance

Answer 5:- b) Divisive clustering

Answer 6 :- d) All answers are correct

Answer 7:- a) Divide the data points into groups

Answer 8:- b) Unsupervised learning

Answer 9:- d) All of the above

Answer10:- a) K-means clustering algorithm

Answer11:- d) All of the above

Answer12:- a) Labeled data

Answer13:- cluster analysis calculated by the Three Types of Algorithm which are following.

1. K-means clustering
2. Hierarchical clustering
3. DBSCAN Algorithm

K-means clustering

The simple steps behind the K-means clustering algorithm are:

1. Decide how many clusters (k) value.
2. Place the k central points in different locations.
3. Take each data point and place it close to the central point & Repeat until all the data points assigned.
4. Re-calculate k new central points as barycenters.
5. Repeat the assigning of data points, this time to the new central point (the barycenter).
6. Repeat 4 and 5 steps again, the central points (barycenters) do not move any more.

Hierarchical clustering

1. calculate the distances
- 2 link the clusters
3. choose a solution by selecting the right number of clusters.

DBSCAN Algorithm

1. Identify a core point and make a group for each connected group of core points.
2. Identify and assign border points to their respective core points.

Answer14:- In k-means, computing the sum of the squared error (SSE) after , match the previous iteration's assignment.

Answer15:- Clustering is a group of Similar data point, it's a Statistical method used to similar data point or object into the respective categories.

Types of Clustering:-

1. Hierarchical cluster analysis
2. centroid-based clustering or k-means method
3. density based clustering or DBSCAN
4. Distribution based clustering