

Machine Learning Assignment-2

Q.1. Answer- a) 2 Only

Q.2. Answer- d) 1, 2 and 4

Q.3. Answer- a) True

Q.4. Answer- a) 1 only

Q.5. Answer- b) 1

Q.6. Answer- b) No

Q.7. Answer- a) Yes

Q.8. Answer- d) All of the above

Q.9. Answer- a) K-means clustering algorithm

Q.10. Answer- d) All of the above

Q.11. Answer- d) All of the above

Q.12. Answer- Yes, K-Means clustering algorithm is most sensitive to outliers as it uses the mean of cluster data points to find the cluster center.

Q.13. Answer- K-Means is an Unsupervised Learning and relatively simple to implement. It scales to large data sets and guarantees convergence. It can warm-start the positions of centroids and easily adapts to new examples. It generalizes to clusters of different shapes and sizes, such as elliptical clusters. It can warm-start the positions of centroids. Easily adapts to new examples. Generalizes to clusters of different shapes and sizes, such as elliptical clusters.

Q.14. Answer- No, K means is not a deterministic algorithm, it is non-deterministic algorithms. It limits their applicability in areas such as cancer subtype prediction using gene expression data. It is hard to sensibly compare the results of such algorithms with those of other algorithms.