

MACHINE LEARNING ASSIGNMENT – 2

Q1Ans: a

Q2 Ans: d

Q3 Ans: a

Q4 Ans: a

Q5 Ans: b

Q6 Ans: b

Q7 Ans: a

Q8 Ans: d

Q9 Ans: a

Q10 Ans: d

Q11 Ans: d

Q12 Ans: The K-means clustering algorithm is sensitive to outliers, because a mean is easily influenced by extreme values. K-medoids clustering is a variant of K-means that is more robust to noises and outliers

Q13 Ans: Following are the advantages that shows why K means is better.

- Relatively simple to implement.
- Scales to large data sets.
- Guarantees convergence.
- Can warm-start the positions of centroids.
- Easily adapts to new examples.
- Generalizes to clusters of different shapes and sizes, such as elliptical clusters.

Q14 Ans: K-means clustering is based on a non-deterministic algorithm.