Assignment 2

Machine Learning

Q1. B)

Q2. D)

Q3. A)

Q4. A)

Q5. B)

Q6. B)

Q7. A)

Q8. D)

Q9. A)

Q10. D)

Q11. D)

Q12. Yes the k-means algorithm is sensitive to the outliers.

Q13. Can warm-start the positions of centroids. Easily adapts to new examples. Generalizes to clusters of different shapes and sizes, such as elliptical clusters. You can use the k-means algorithm to maximise the similarity of data points within clusters and minimise the similarity of points in different clusters. As noted above, it is an unsupervised algorithm that does not make use of labelled data or a training dataset.

Q14. No k-means is non-deterministic algorithm.