MACHINE LEARNING ASSIGNMENT 2

Q1. Movie Recommendation systems are an example of:

ANS :- 1 and 2.

Q2. Sentiment Analysis is an example Of:

ANS :- Regression.

Q3. Can decision trees be used for performing clustering?

ANS :- True.

Q4. Which of the following is the most appropriate strategy for data cleaning before performing clustering analysis, given less than desirable number of data points:

ANS :- 1 only.

Q5. What is the minimum no. of variables/ features required to perform clustering?

ANS :- 1.

Q6. For two runs of K-Mean clustering is it expected to get same clustering results?

ANS :- No.

Q7. Is it possible that Assignment of observations to clusters does not change between successive iterations in K-Means?

ANS :- Can't say.

Q8. Which of the following can act as possible termination conditions in K-Means?

ANS :- All of the above.

Q9. Which of the following algorithms is most sensitive to outliers?

ANS :- K-means clustering algorithm.

Q10. How can Clustering (Unsupervised Learning) be used to improve the accuracy of Linear Regression model (Supervised Learning):

ANS :- 1 only.

Q11. What could be the possible reason(s) for producing two different dendrograms using agglomerative clustering algorithms for the same dataset?

ANS :- All of the above.

Q12. Is K sensitive to outliers?

ANS :- The K-Means algorithm is sensitive to the outliers.

Q13. Why is K means better?

ANS:- Guarantees convergence can warmstart the position of centroids.

Q14. Is K means a deterministic algorithm?

ANS :- The non-deterministic nature of K_Means is due to its random selection of data points as initial centroids.