MACHINE LEARNING WORKSHEET - 2

1. A) 2 only

2. D) 1, 2 and 4

3. A) True

4. A) 1 only

5. B) 1

6. B) No

7. A) Yes

8. D) All of the above

9. A) K-means clustering algorithm

10. D) All of the above

11. D) All of the above

12. Is K sensitive to Outliers?

Yes. K means is sensitive to Outliers.

In K-Means clustering outliers are found by distance based approach and cluster based approach. In case of hierarchical clustering, by using dendrogram outliers are found. The goal of the project is to detect the outlier and remove the outliers to make the clustering more reliable.

Example :

The mean of 2,2,2,3,3,3,4,4,4 is 3

By Adding a single number 23 , the mean is 5

This is an example of outlier sensitive calculation

13. Why is K means better ?

★ It is very easy to understand and implement.

★ If we have large number of variables then, K-means would be faster than Hierarchical clustering.

★ On re-computation of centroids, an instance can change the cluster.

★ Tighter clusters are formed with K-means as compared to Hierarchical clustering

14. Is K means a deterministic algorithm?

No, it's non deterministic.

The non-deterministic nature of K-Means is due to its random selection of data points as initial centroids. Method: We propose an improved, density based version of K-Means, which involves a novel and systematic method for selecting initial centroids.

STATISTICS WORKSHEET - 2

1. C) Both

2. C) 12

3. A) An approximate indicator of how number vary from the mean

4. C) Both of these

5. B) Summarizing and explaining a specific set of data

6. B) Data Set

7. A) 2 or more

8. B) Scatterplot

9. D) Analysis of variance

10. A) Z score

11. C) Mean

12. D) 400005.2

13. D) Mean

14. A) Descriptive and inferences

15. D) H-L

SQL WORKSHEET - 2

1. D) Unique

2. C) Null

3. A) Each entry in the primary key uniquely identifies each entry or row in the table

4. D) All of the above

5. B) Foreign Key

6. B) 3

7. C) One to one

8. A) one to many

9. D) None of them

10. B) 1

11. C) One to one

12. C) Table

13. A) Insert in to

14. B), C) Unique, Primary Key

15. A) A blood group can contain one of the following values - A, B, AB and O