## Machine Learning

1. All of the above.
2. None
3. Reinforcement Learning and Unsupervised Learning
4. The tree representing how close the data points are to each other.
5. None
6. k-nearest neighbour is same as k-means
7. 1, 2 and 3
8. 1 only
9. 2
10. B
11. A
12. B
13. Clustering helps in grouping a set of objects in a dataset so that objects in the same group are similar to each other than objects in a different group. It divides the unstructured data into clusters according to their common attributes.

## SQL

1. CREATE TABLE Customers( customerNumber INT PRIMARY KEY, customerName TEXT,contactLastName TEXT,contactFirstName TEXT,phone INT, addressLine1 TEXT,addressLine2 TEXT, city TEXT, state TEXT, postal code INT, country TEXT, salesREPEmployeeNumber INT PRIMARY KEY, creditLimit INT)

2. CREATE TABLE Orders( orderNumber INT PRIMARY KEY, orderDate INT, requiredDate INT, shippedDATE INT, status TEXT, comments TEXT, customerNumber INT,FOREIGN KEY(customerNumber) REFERENCES Customers (customerNumber)

3. Results=SELECT * FROM Orders
   for row in Results:
   print (row)

4. SELECT *comments FROM Customers

5. SELECT COUNT(orderNumber) FROM Orders WHERE orderDate=’ ‘

6. SELECT employeENumber, lastName, firstName FROM employees

7. SELECT Customers.contactLastName, Customers.FirstName, Orders.orderNumber FROM Orders INNER JOIN Customers ON Customers.customerNumber=Orders.customerNumber

8. SELECT SUM(amount) FROM payments WHERE payments.paymentDate=’ ‘

9. SELECT productName, MSRP, productDescription FROM products
10. SELECT city.Customers WHERE MAX(quantityOrdered) FROM orderdetails
11. SELECT MAX(WHERE MAX(quantityOrdered) FROM orderdetails

## Statistics

1. Total Variation = Residual Variation + Regression Variation
2. Binomial
3. 2
4. Type-I error
5. Level of confidence
6. Increase
7. Hypothesis
8. All of the mentioned
9. 0
10. Bayes' Theorem states that the conditional probability of an event, based on the occurrence of another event, is equal to the likelihood of the second event given the first event multiplied by the probability of the first event.

11. Z-score is a measurement that describes a value's relationship to the mean of a group of values. Z-score is measured in terms of standard deviations from the mean. If a Z-score is 0, it indicates that the data point's score is identical to the mean score.

12. T-test is a statistical test which is used to calculate the mean value between two samples. It is based on a null hypothesis which states that the difference in mean in both the groups are zero and in an alternate hypothesis that the difference in mean in both the groups are other than zero.

13. A percentile is a term that describes how a score compares to other scores from the same set. It is commonly expressed as the percentage of values in a set of data scores that fall below a given value.

14. ANOVA stands for Analysis of Variance. ANOVA helps if there are any statistical differences between the means of three or more independent groups. It justifies if sample results are applicable to populations

15. An ANOVA test is a way to find out if survey or experiment results are significant. In other words, they help in finding out if there is a need to reject the null hypothesis or accept the alternate hypothesis. There are two types of Anova Test- i) One way Anova- which takes a single independent variable ii) Two-way Anova- which takes two independent variable