

## Machine Learning

1.D

2.D

3.C

4.B

5.D

6.C

7.D

8.B

9.A

10.B

11.A

12.B

## 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 employeeENumber, 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.B

2.C

3.A

4.A

5.C

6.B

7.B

8.D

9.A

10. Bayes, is a mathematical formula for determining conditional probability is the likelihood of an outcome occurring, based on a previous outcome having occurred in similar circumstances. Bayes' theorem provides a way to revise existing predictions or theories given new or additional evidence.

11. A Z-score is a numerical 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. A Z-score of 1.0 would indicate a value that is one standard deviation from the mean. Z-scores may be positive or negative, with a positive value indicating the score is above the mean and a negative score indicating it is below the mean.

12. A t-test is an inferential statistic used to determine if there is a significant difference between the means of two groups and how they are related. The t-test is a test used for hypothesis testing in statistics and uses the t-statistic, the t-distribution values, and the degrees of freedom to determine statistical significance.

13. percentiles are used to understand and interpret data. The  $n$ th percentile of a set of data is the value at which  $n$  percent of the data is below it. In everyday life, percentiles are used to understand values such as test scores, health indicators, and other measurements

14. An ANOVA test is a way to find out if survey or experiment results are significant. In other words, they help you to figure out if you need to reject the null hypothesis or accept the alternate hypothesis.

15. ANOVA is helpful for testing three or more variables.

The one-way ANOVA can help you know whether or not there are significant differences between the means of your independent variables (such as the first example: age, sex, income). When you understand how each independent variable's mean is different from the others, you can begin to understand which of them has a connection to your dependent variable (landing page clicks), and begin to learn what is driving that behavior.