**Tableau- Assignment 8**

1. You can do calculations on the data values in your fields using number functions. Only fields with numerical values can be used with number functions. With the help of a dataset of your own choice, illustrate the use of the string functions CEILING (number) and FLOOR (number). Mention your inferences from the illustration.

Ans: CEILING (number) function returns the smallest integer value greater than or equal to the specified number. Let's say the company wants to calculate the number of days worked by each employee based on the assumption that a full day of work is 8 hours. We can use the CEILING function to round up the number of hours worked by each employee to the nearest integer and then divide by 8 to get the number of days worked.

CEILING (20.8) = 21

FLOOR (number) function, on the other hand, returns the largest integer value less than or equal to the specified number. Let's say the company wants to calculate the number of weeks worked by each employee based on the assumption that a full week of work is 40 hours. We can use the FLOOR function to round down the number of hours worked by each employee to the nearest integer and then divide by 40 to get the number of weeks worked.

FLOOR (20.8) = 20

1. Tableau has a number of string methods to make dealing with strings possible. With the help of a dataset of your own choice, illustrate the use of the string functions- concatenation, Left() and Find(). Mention your inferences from the illustration.

Ans:

* CONCATENATE function can be used to combine strings from different columns into a single column.

CONCATENATE(‘Radhe’,’Shyam’) = RadheShyam

* LEFT() function can be used to extract a specified number of characters from the beginning of a string.

LEFT(‘Radheshyam’,5) = Radhe

* FIND() function can be used to find the position of a substring within a string.

FIND(‘d’,’Radheshyam’) = 3

1. Tableau has several logical methods to make dealing with strings possible. With the help of a dataset of your own choice, illustrate the use of the logic functions- CASE() and IF ELSE(). Mention your inferences from the illustration.

Ans:

* CASE() function can be used to apply logical conditions on a column and create a new column based on those conditions.
* IF ELSE() function can be used to apply logical conditions on a column and create a new column based on those conditions.
* In the given example, the CASE() function was used to categorize the products into different categories based on their names, and the IF ELSE() function was used to categorize the orders into different categories based on their prices.

1. Tableau has a number of date methods to make dealing with dates possible. With the help of a dataset of your own choice, illustrate the use of the datefunctions- DATEDIFF() and DATE(). Mention your inferences from the illustration.

Ans:

* DATEDIFF() function can be used to calculate the difference between two dates in terms of a specified unit of time.
* DATE() function can be used to extract a specific component of a date, such as the year, month, or day.

1. Calculations that are performed on a whole table are called table calculations. Table computations basically involve applying some sort of aggregation level to values that are returned from the database.With the help of a dataset of your own choice, illustrate the use of the table calculations- First() and Index(). Mention your inferences from the illustration.

Ans:

* First() function can be used to return the value of the first row of a partition.
* Index() function can be used to return the position of a row within a partition.