## **Tableau**

# **Assignment 2**

#### 1. What is Tableau Data Engine?

**Ans:** Hyper is Tableau's in-memory Data Engine technology optimized for fast data ingests and analytical query processing on large or complex data sets. Starting in the Tableau 10.5 release, Hyper powers the Data Engine in Tableau Server, Tableau Desktop, Tableau Online, and Tableau Public. The Data Engine is used when creating, refreshing or querying extracts. It is also used for cross-database joins to support federated data sources with multiple connections.

#### 2. How to create a calculated field in Tableau?

**Ans:** First, select Analysis > Create Calculated Field. Give your calculated field a name. In the Calculation Editor, enter a formula. When finished, click OK.

#### 3. Can you tell the differences between TreeMap and Heat Map?

**Ans:** A two-dimensional representation of information with the help of colors is known as the Heatmap. These maps are used to visualize both simple and complex data. A column or an expression is represented by the rectangles on the same level in Treemap. The category of each column is represented by each rectangle in the level.

#### 4. What are the components of a dashboard?

**Ans:** Tableau essentially has three parts to it — the worksheet, the dashboard and the layout containers.

#### PROBLEM WITH PRACTICE

Data: US Superstore

Data Link: <a href="https://www.kaggle.com/juhi1994/superstore">https://www.kaggle.com/juhi1994/superstore</a>

5. Based on the given data, analyse and answer the following questions a. How much sales have come from customers from the previous in the current year in terms of Sales Value?

Ans: Customers joined in year 2010 brought 19 lakh sales.

#### Comparing 2011 Sales with its previous year 2010:

The newly joined customers in 2011 brought 9 lakh sales when compared to its previous year 2010 customers who brought 10 lakh sales. This indicates "customers joined in year 2010 are loyal in 2011 year as well.

#### Comparing 2012 Sales with its previous year 2011:

The newly joined customers in 2012 brought less sales (5 lakh 33 thousand) than the customers who joined in 2011(5 lakh 52 thousand) and the customers who joined in 2010(10 lakhs).

The loyalty of customers of 2011 decreased in the year 2012 when compared with 2011.

The loyalty of customers of 2010 increased in the year 2012 when compared with 2011.

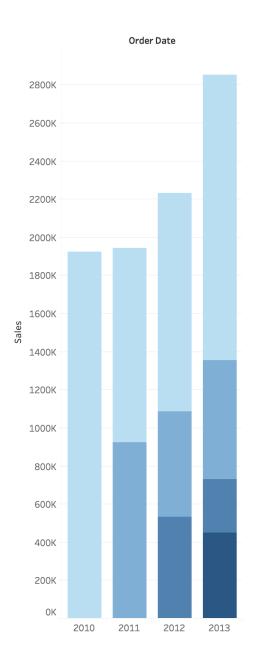
#### Comparing 2013 Sales with its previous year 2012:

The newly joined customers in 2013 brought less sales (4 lakh 50 thousand) than the customers who joined in the year 2010,2011. But brought better sales when compared with the customers who joined in the year 2012.

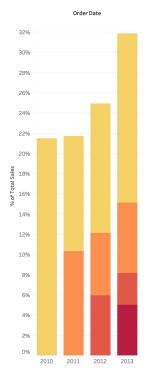
The loyalty of customers of 2012 decreased in the year 2013 when compared with 2013.

The loyalty of customers of 2011 increased a little bit in the year 2013 when compared with 2012.

The loyalty of customers of 2010 increased constantly from 2011 to 2013 which indicates that "the customers of 2010 are more loyal than the customers of 2011,2012 and 2013".



# b. How much sales have come from customers from the previous in the current year in terms of Sales Percentage? Ans:



### c. Find the orders placed by each customer.

