Tableau Challenge

NOTE: You are given tasks for both Informatica and Tableau. Each part has it's own input files and these two parts are independent. You can perform these parts in any order and both should be completed.

You are given a dataset which contains the data about Superstore and their sales, profit and various cities and regions where stores are located. As a Tableau developer you need to use the data to perform the required visualizations to the given dataset.

To perform this task, you are provided with the files required are in the **"~Desktop/Project/wingst13-mock-superstore-challenge"**.

Input files:

wingst13-mock-superstore-challenge: This folder is available inside the Project folder on the desktop.

Note:

- The **wingst13-mock-superstore-challenge** folder consists of files named as deliveries.csv and matches.csv datasets that you shall perform the visualizations in an empty Tableau workbook with the name HackBook.twb.
- The **Output_Data** folder is an empty folder where you can save the output data after the visualizations are performed.

Instructions

Follow the below steps to export the data in tableau:

- To export your data, go to '**Analysis → View Data → Download**'
- Save your file with the name – **<mention as in problem statement>**
- The path where you should save the data for the Sheet is

  '/Desktop/Project/wingst13-mock-superstore-challenge/Output_Data/tableau/'

Let's Begin!!!!

Follow the instructions that are given below to transform the raw csv data into the visualizations.

1. Double click **HackBook.twb**. A workbook will open in Tableau Desktop (**14-day trial version**) software.
2. When prompted for user information, enter random details and click **Proceed**.
3. Create the sheets with the given chart titles following the instructions.

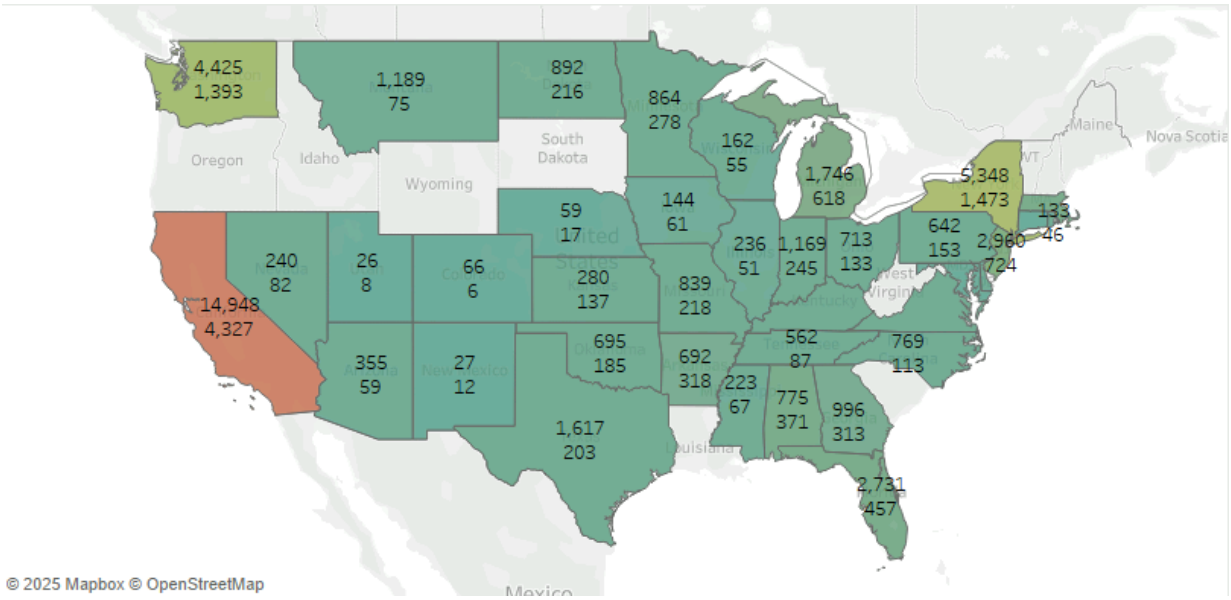
Sheet 1: Profitable States

Chart Title: Profitable States based on Sales

Rows	Columns	Mark
Longitude (generated)	Latitude (generated)	Map

1. Create a **Map chart** that focuses on analyzing profit of various **"States"** using overall sales. It achieves this through a combination of calculated fields, filters, and visualizations. Please follow the steps given to achieve this.
2. Filter the **"Ship Date"** as 2022 to find the sales happened only in that year**.**
3. Filter the Order which are only **"Profitable"** using **"Order Profitable?"** column.
4. Find the **"Office Supplies"** category using filter and show the filter in dropdown to select various categories.
5. Differentiate the states using "**Profit"** in color and show the values of **"Sales"** and **"Profit"** in label to visualize the values for each state.
   Finally, export the data into "**csv"** in the path **'/Desktop/Project/wingst13-mock-superstore-challenge/Output_Data/tableau/'** named as "**Profitable_States.csv**".
   NOTE: If you don't know how to export the data as a csv file you can refer the Instructions.

SAMPLE OUTPUT :



Note: The sample output is given for your reference it may vary with the actual output

Sheet 2: Sales Analysis

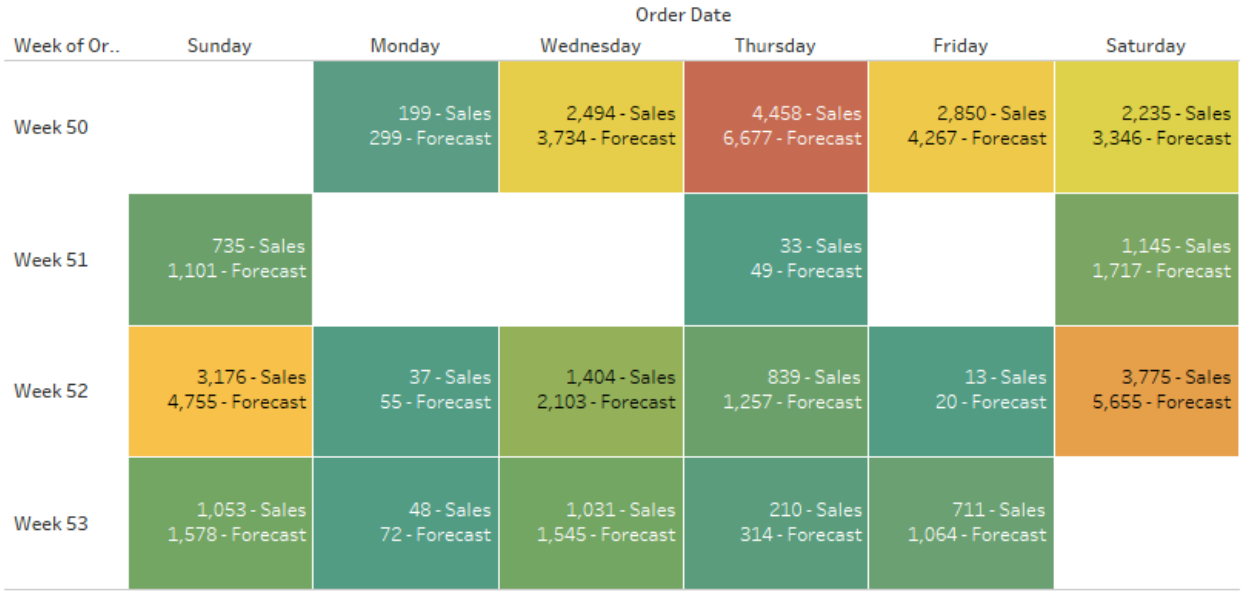
Chart Title: Sales Analysis based on forecast and actual sales

Rows	**Columns**	**Mark**
Order Date (Weeknumber)	Order Date (Week)	Square

1. Create a **Heat Map chart** showing the analysis of **Sales** of each day based on the sales forecast and actual sales. Please follow the steps given to achieve this.
2. Filter the Order date with year as **"2022"** and weeks as **"50, "51", "52"** and **"53"** to find the sales only for the final month of final year.
3. Using Order date as Weekday and Week, create the Square chart and differentiate the sales using Sales in color.
4. Show the **Sales and Sales Forecast** in the Square chart using Label and add prefix **" - Sales"** for Sales label and **" – Forecast"** for Sales Forecast Label.
5. Show the **Year filter of Order date** as dropdown to visualize more years.

Finally, export the data into "**csv"** in the path **'/Desktop/Project/wingst13-mock-superstore-challenge/Output_Data/tableau/'** named as "**Sales_Analysis.csv**".
NOTE: If you don't know how to export the data as a csv file you can refer the **Instructions**.

SAMPLE OUTPUT :



Note: The sample output is given for your reference it may vary with the actual output

Sheet 3: City based Profit

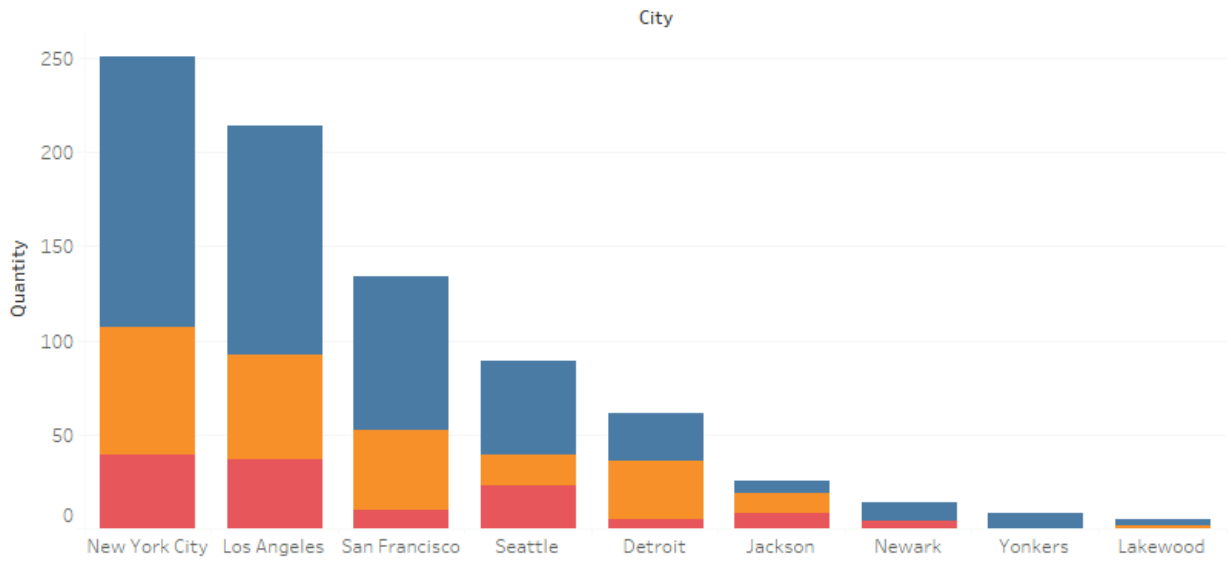
Chart Title: City based Profit with Quantity

Rows	**Columns**	**Mark**
Quantity	City	Bar

1. Create a **Bar Chart** showing Top 10 Cities Profit based on Quantity. Please follow given steps to achieve this.
2. Filter the Category as **"Furniture"** and show the filter as dropdown to find only the Furniture category.

3. Filter the **Top 10 Cities** based on the **Profit** and sort the cities based on the **Quantity** in **Descending order.**
4. To Differentiate the chart values, use **Segment** in color and **Profit** in Tooltip.
   Finally, export the data into "**csv"** in the path **'/Desktop/Project/wingst13-mock-superstore-challenge/Output_Data/tableau/'** named as "**City_based_Profit.csv**".
   NOTE: If you don't know how to export the data as a csv file you can refer the Instructions.

SAMPLE OUTPUT :



Note: The sample output is given for your reference it may vary with the actual output

Validation:

- Before closing the environment, make sure that you have saved all your visualizations into the HackBook.twb by going into **File->Save**
- Before closing the environment, ensure that all these output files are saved in the local directory with the output obtained after performing the visualizations.
  '/Desktop/Project/wingst13-mock-superstore-challenge/Output_Data/Tableau'
  1. **Profitable_States.csv**
  2. **Sales_Analysis.csv**
  3. **City_based_Profit.csv**

- Right click on **sampletest.ps1** and click **'Run with Powershell'** to run the sample score.

Congratulations!!! You have completed your challenge. Sit, Relax & Wait for the Result