# Tableau Introduction-Assignment 1

1. "twbx" is a bundled workbook for Tableau. The original .twb file is bundled with the data source in this package. It can be compared to a compressed file. It contains all the information and instructions required to operate in Tableau. Since the data is contained within the .twbx file itself, one can still access and use it without a network or Internet connection. The .twb file and the data source can be separated from the .twbx file by unpacking it. Pick up any dataset of your choice, create a simple bar chart using the fields of the dataset and save the visualization created in .twbx format. Analyze the properties of the newly created twbx file and segregate the .twbx file into .twb and data source.
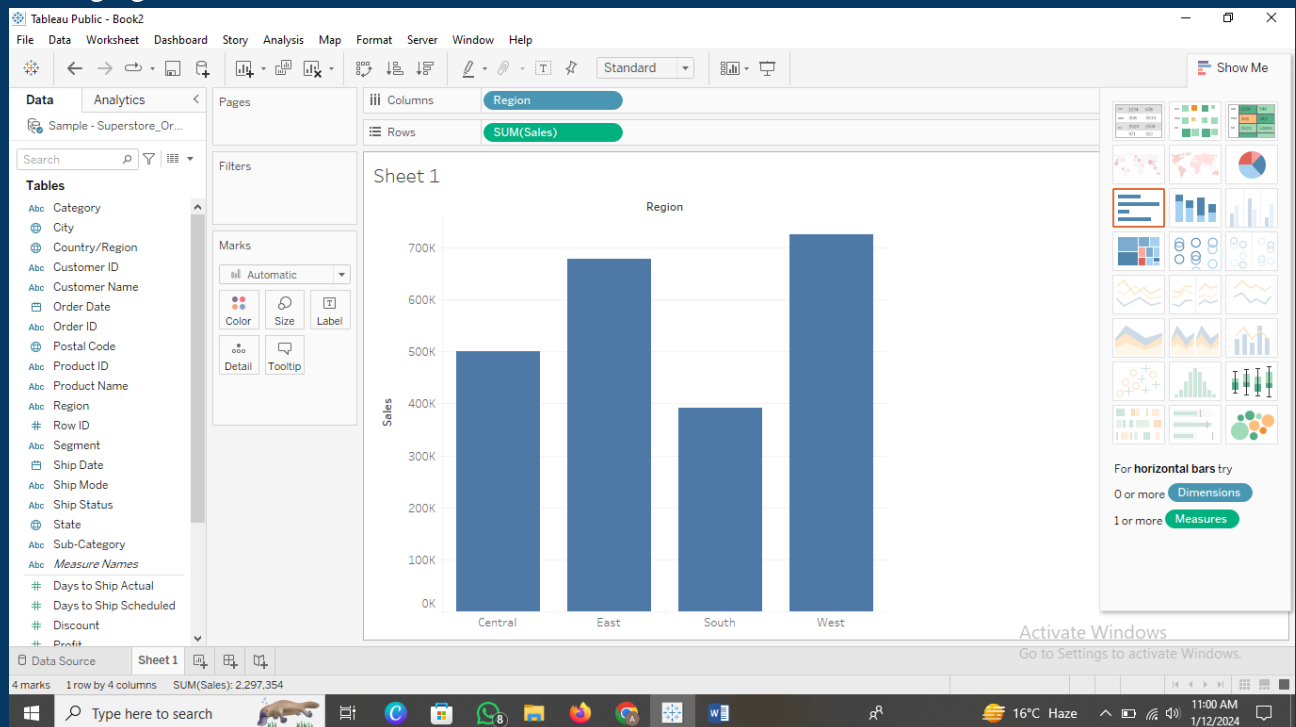
2. Using the "Sample-Superstore.xls" file, create a scatter and a bubble plot between different measures in the dataset and observe the type of correlation (negative or positive or no correlation) between them. Draw a comparison between the bubble chart and the scatter plot.
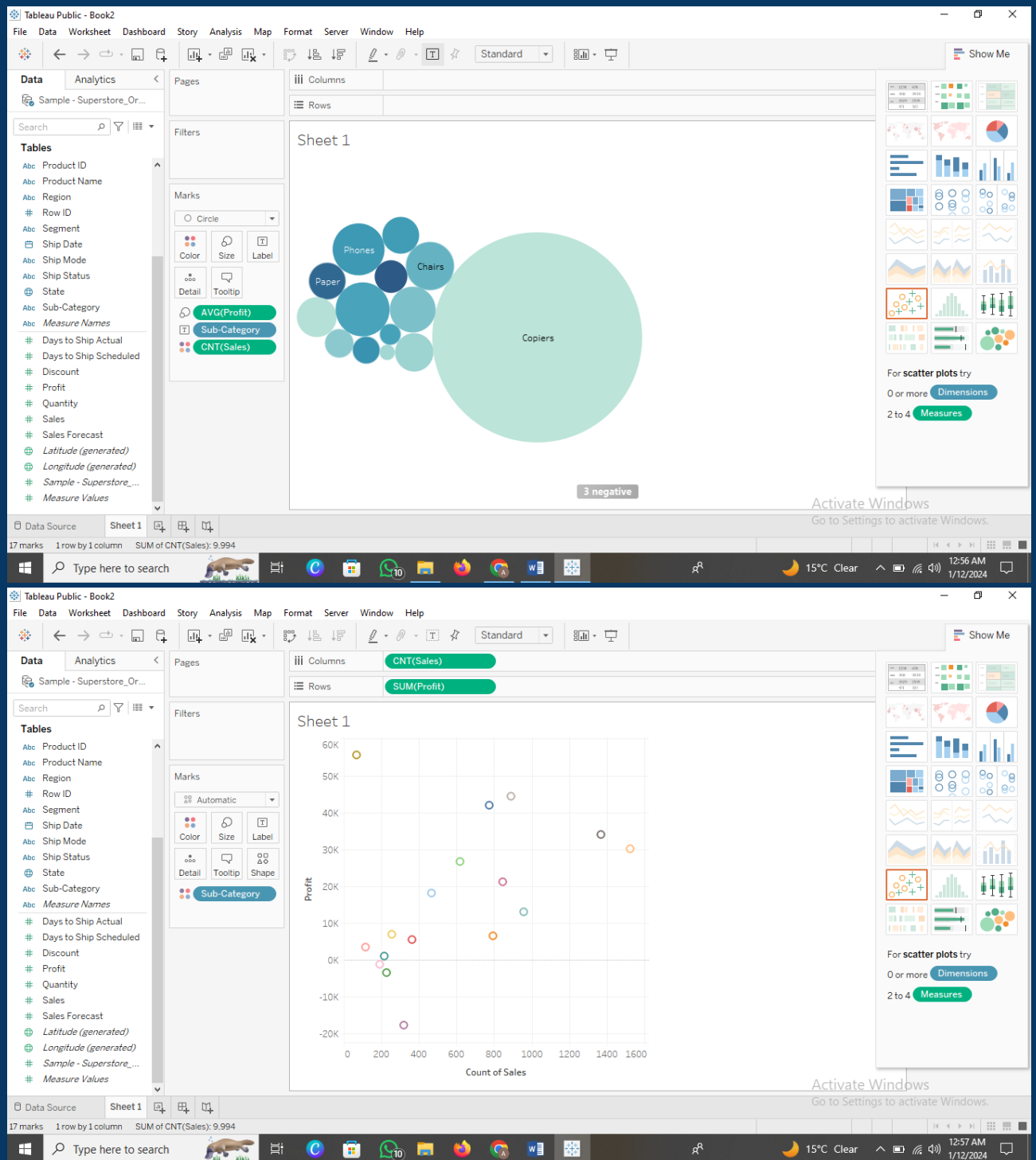
3. Consider that you are an HR representative for a multinational company. The staff database is under your control. There are certain details regarding employees that you must never divulge. However, there are many bits of information about employee abilities and skills that may be shared. Using the data extract option in tableau, build a packaged worksheet and use the option "Hide All Unused Fields" in the data extract feature to hide all the fields-dimensions and measures which you haven't used in the visualization and do not wish to share with employees. Feel free to use any HR dataset or you may even create a dummy data for illustration purpose.
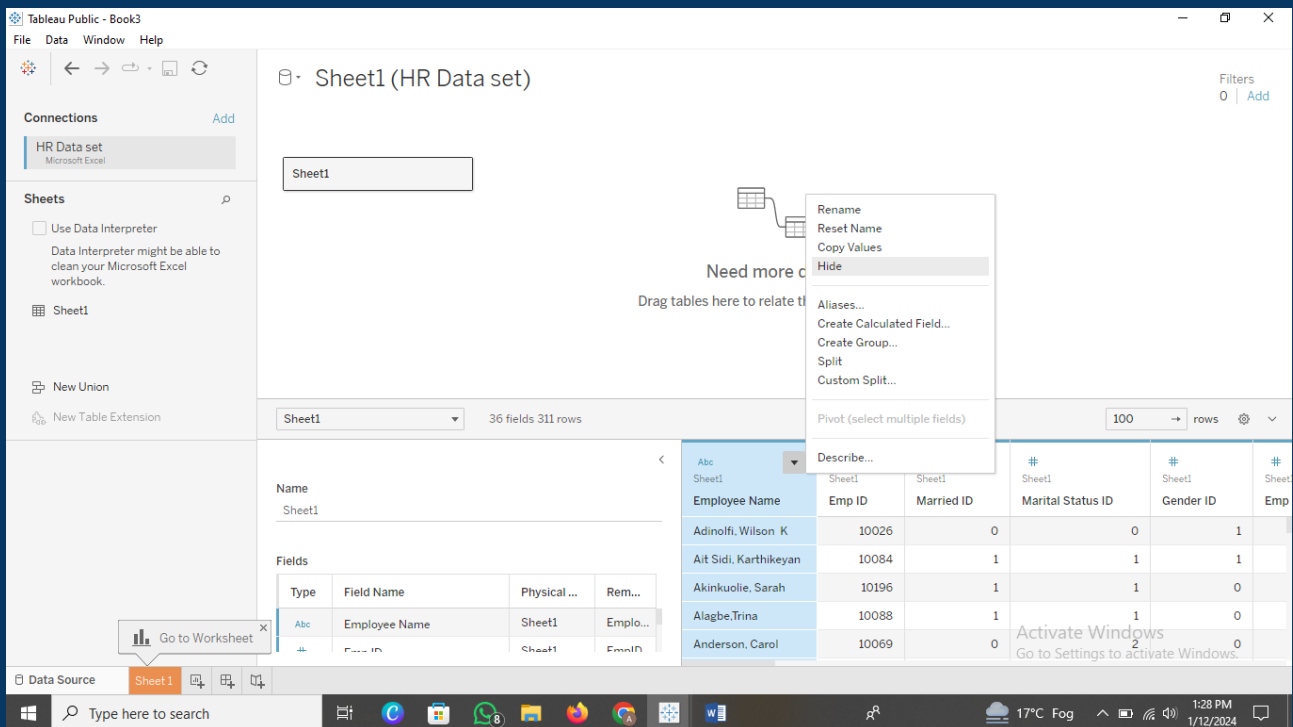
4. Discuss the differences between the "Measure Names" and "Measure Values" pre-defined features in Tableau. Using the "PowerStore_USA" dataset available in your iNeuron resources, create a visualization using "Measure Names" and "Measure Values" and mention the fields that fall into each category- "Measure Names" and "Measure Values".

the key differences between "Measure Names" and "Measure Values":

1. Measure Names:
- **Role:**
  - "Measure Names" is a predefined field in Tableau that acts as a dimension.
- **Purpose:**
  - It allows you to dynamically switch between different measures in the view.
- **Usage:**
  - Dragging "Measure Names" to the Rows or Columns shelf provides a filter-like experience, enabling users to select which measures they want to include in the view.
- **Example:**
  - If your dataset has measures like Sales, Profit, and Quantity, "Measure Names" would allow you to choose which of these measures you want to visualize at a given time.
- **Aggregation:**
  - "Measure Names" does not hold any specific numerical values; it acts as a selector for measures.
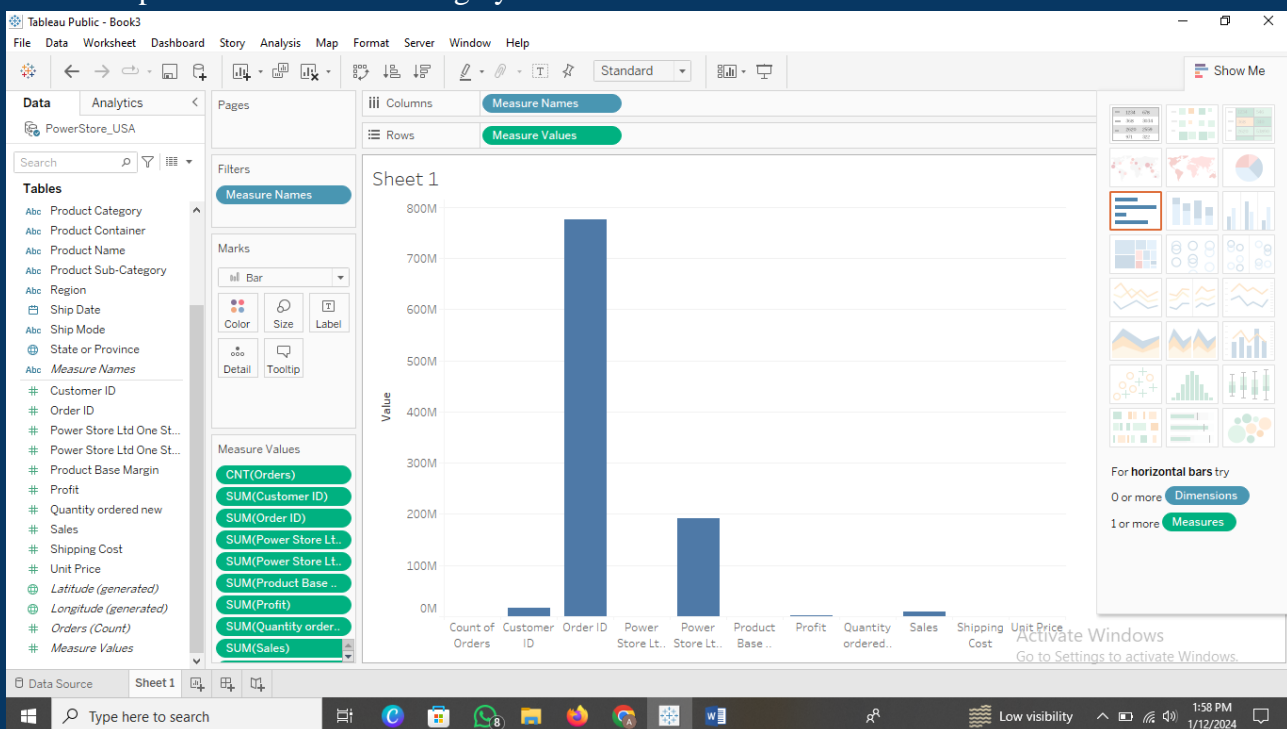
2. Measure Values:
- **Role:**
  - "Measure Values" is also a predefined field, but it acts as a measure.
- **Purpose:**
  - It allows you to aggregate multiple measures into a single value.
- **Usage:**
  - Dragging "Measure Values" to the Rows or Columns shelf automatically includes all the measures in the dataset, providing a consolidated view of their aggregated values.
- **Example:**

- If you have measures like Sales, Profit, and Quantity, "Measure Values" would aggregate these values based on the chosen aggregation method (e.g., sum, average).
- **Aggregation:**
    - "Measure Values" represents the combined result of all selected measures, aggregated based on the chosen aggregation method.

Key Points:
- **Dynamic Selection:**
    - "Measure Names" allows users to dynamically select which measures to include in the view.
    - "Measure Values" automatically includes all measures in the dataset.
- **Aggregation:**
    - "Measure Names" doesn't aggregate any values; it's used for measure selection.
    - "Measure Values" aggregates the values of selected measures based on the chosen aggregation method.
- **Flexibility:**
    - "Measure Names" provides more flexibility in choosing and switching between measures.
    - "Measure Values" provides a quick way to include all measures in a view.

Understanding the differences between these two pre-defined fields is crucial for efficiently working with multiple measures and creating dynamic and interactive visualizations in Tableau.

PFA links for the datasets used.