

# Power BI

## Workbook 2

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### Instructions:

There are some practical steps and some descriptive questions. For descriptive answers, you are required to create a doc file and write your insights on it and upload it along with the power bi file on the LMS.

**Note: Please make a separate .pbix file for this. DO NOT do this assignment on the sample superstore file that we do in class, we are working on it for certain visualizations.**

**Grading Points = 4+3+3 = 10 points**

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Using the Sample Superstore file that was shared with you,

- **Data Shaping**

1. **Renaming:** Rename the State or Province column in the Orders table to State.
2. **Promoting Headers:** The Users table seems to have its headers in the first row. Promote the first row to headers.
3. **Duplicating and Replacing Values:** Duplicate the Order Priority column in the Orders table. In the new column, replace the value "Not Specified" with "Medium".
4. **Removing Columns:** Remove the Row ID and Postal Code columns from Orders table.
5. **Filtering and Sorting:** Filter the Orders table to only show orders from the West region. Then, sort the filtered table by Profit in descending order.

- **Data Enhancement (Joins)**

1. **Inner Join:** Join the Orders and Returns tables on the Order ID column. How many orders have been returned?
2. **Left Outer Join:** Join the Users and Orders tables on the Region column. Which managers are associated with orders in each region? Are there any managers without associated orders?
3. **Right Outer Join:** Join the Orders and Users tables on the Region column. Are there any orders from regions not assigned to a manager in the Users table?

- **Data Profiling**

1. **Column Distribution:** Examine the column distribution for Order Priority and Customer Segment in the Orders table. What are the most common values in each column?
2. **Distinct and Unique Values:** How many distinct Ship Mode options are there in the Orders table? How many of those are unique (used only once)?
3. **Data Quality:** Check the column quality for Product Base Margin in the Orders table. Are there any errors or missing values?

**Good Luck**