6. Retrieve the employee performance prediction dataset from

https://kaggle.com/datasets/gauravduttakiit/employee-performance-prediction in tableau .

i. Create a bar chart or treemap showing total sales revenue by product and region.

ii. Create a scatter plot with discount rates on one axis and sales volume or revenue on the other.

Add trend lines to identify correlations.

iii. Use a dual-axis chart or side-by-side bar charts to compare sales and return rates across regions.

iv. Use a heatmap or line chart to analyze monthly or quarterly sales and returns.Step 1: Download and Load the Dataset

Step 1: Download Datasets

- Download the dataset from Kaggle.
- Load the data into Tableau.

Step 2: Create Visualizations

1. **Bar Chart or Treemap - Total Sales Revenue by Product and Region**
    - Go to a new worksheet.
    - Drag **Product** to the Rows shelf.
    - Drag **Region** to the Columns shelf.
    - Drag **Sales Revenue** to Columns and set it to **SUM**.
    - Change the chart type to **Bar Chart** or **Treemap** in the Show Me panel.
    - Optionally, color by **Region** for clarity.
2. **Scatter Plot - Discount Rates vs. Sales Volume/Revenue**
    - Create a new worksheet.
    - Drag **Discount Rate** to the Columns shelf.
    - Drag **Sales Volume** or **Revenue** to the Rows shelf.
    - In the **Analytics** pane, drag **Trend Line** to the scatter plot to highlight correlation.
3. **Dual-Axis or Side-by-Side Bar Chart - Sales and Return Rates Across Regions**
    - Create a new worksheet.
    - Drag **Region** to the Columns shelf.
    - Drag **Sales** to the Rows shelf and **Return Rate** to a second Rows axis.
    - Right-click on **Sales** and select **Dual Axis** to combine both metrics on one chart, or choose **Side-by-Side Bars** for separate comparisons.
    - Optionally, color by **Region**.

4. **Heatmap or Line Chart - Monthly/Quarterly Sales and Returns**
    - Create a new worksheet.
    - Drag **Order Date** to the Columns shelf and choose **Month** or **Quarter** aggregation.
    - Drag **Sales** and **Returns** to the Rows shelf.
    - Set the chart type to **Heatmap** (add **Sales** to Color shelf) or **Line Chart** to observe trends.

7. Refer to dataset in (6) and implement the following

i. Use a scatter plot to analyze the relationship between product price and return rate.

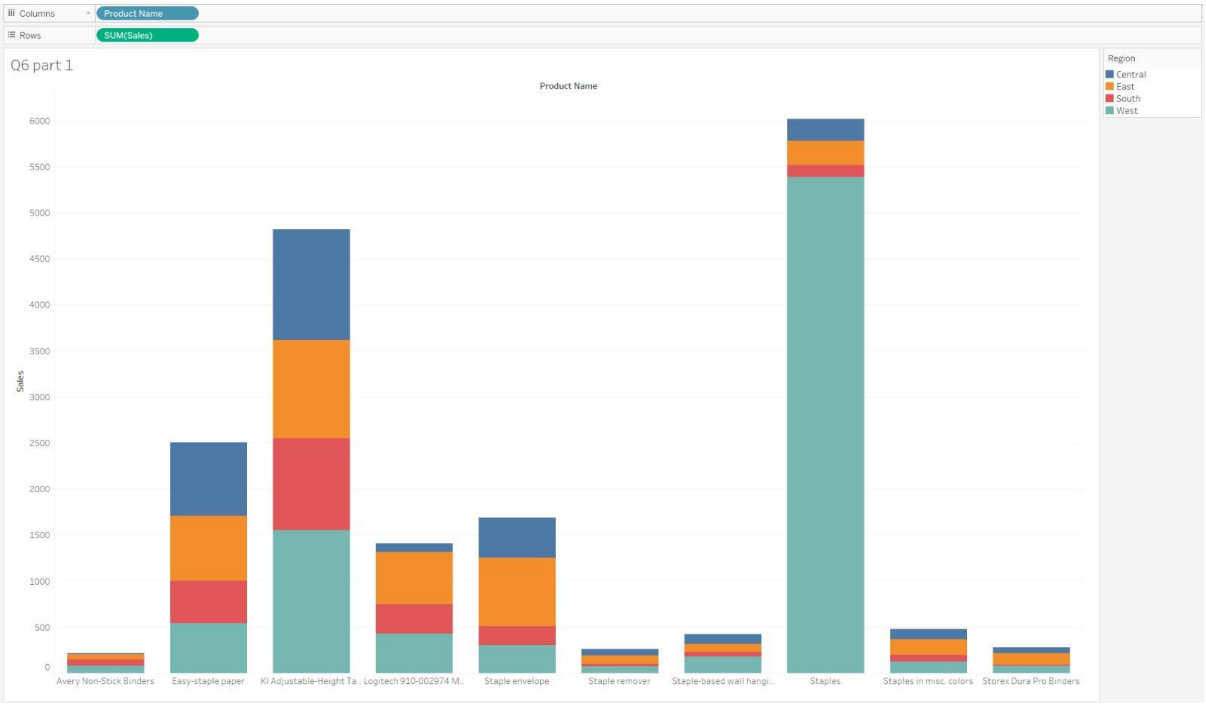
ii. Obtain the following KPI's

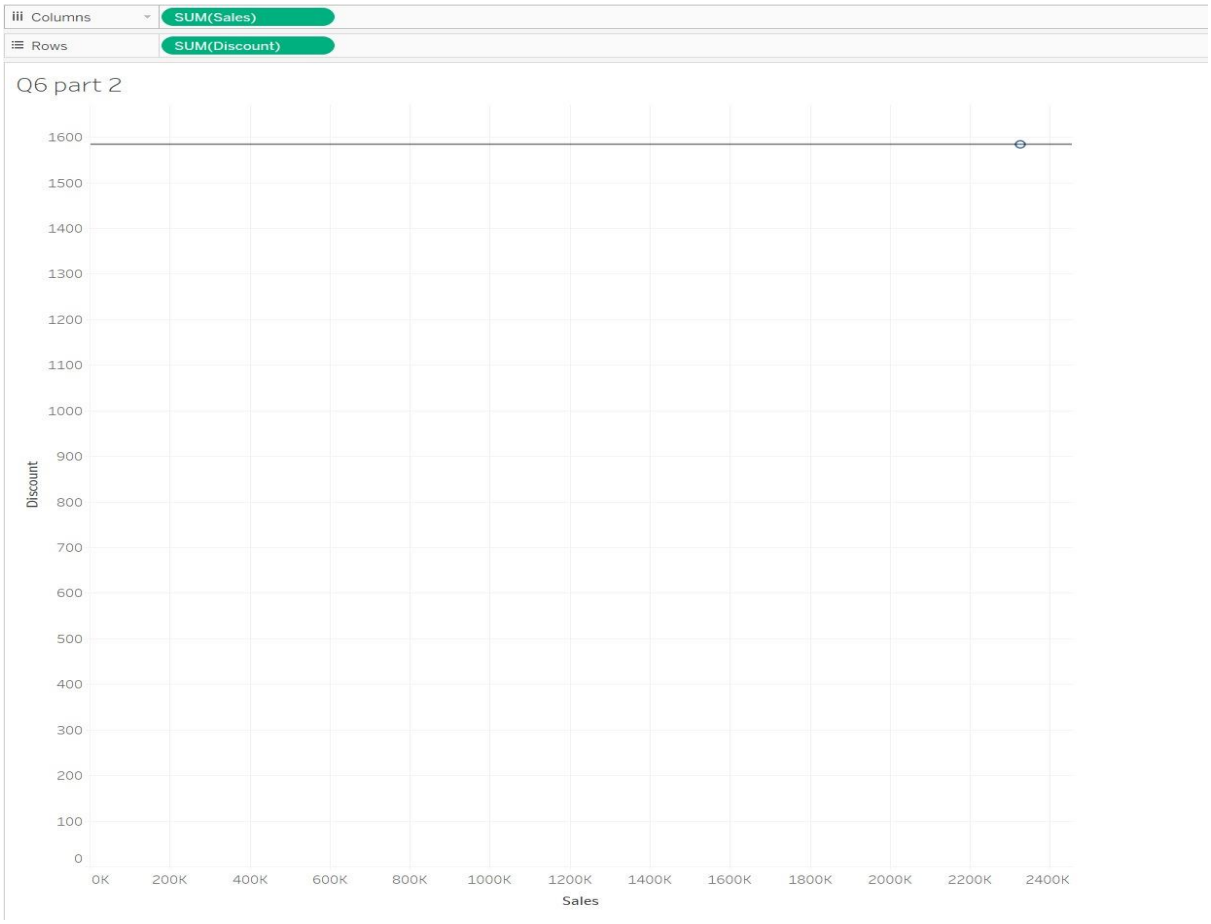
Step 1: Scatter Plot for Product Price vs. Return Rate

- Create a new worksheet.
- Drag **Product Price** to the Columns shelf.
- Drag **Return Rate** to the Rows shelf.
- Use a **Scatter Plot** to analyze the relationship.

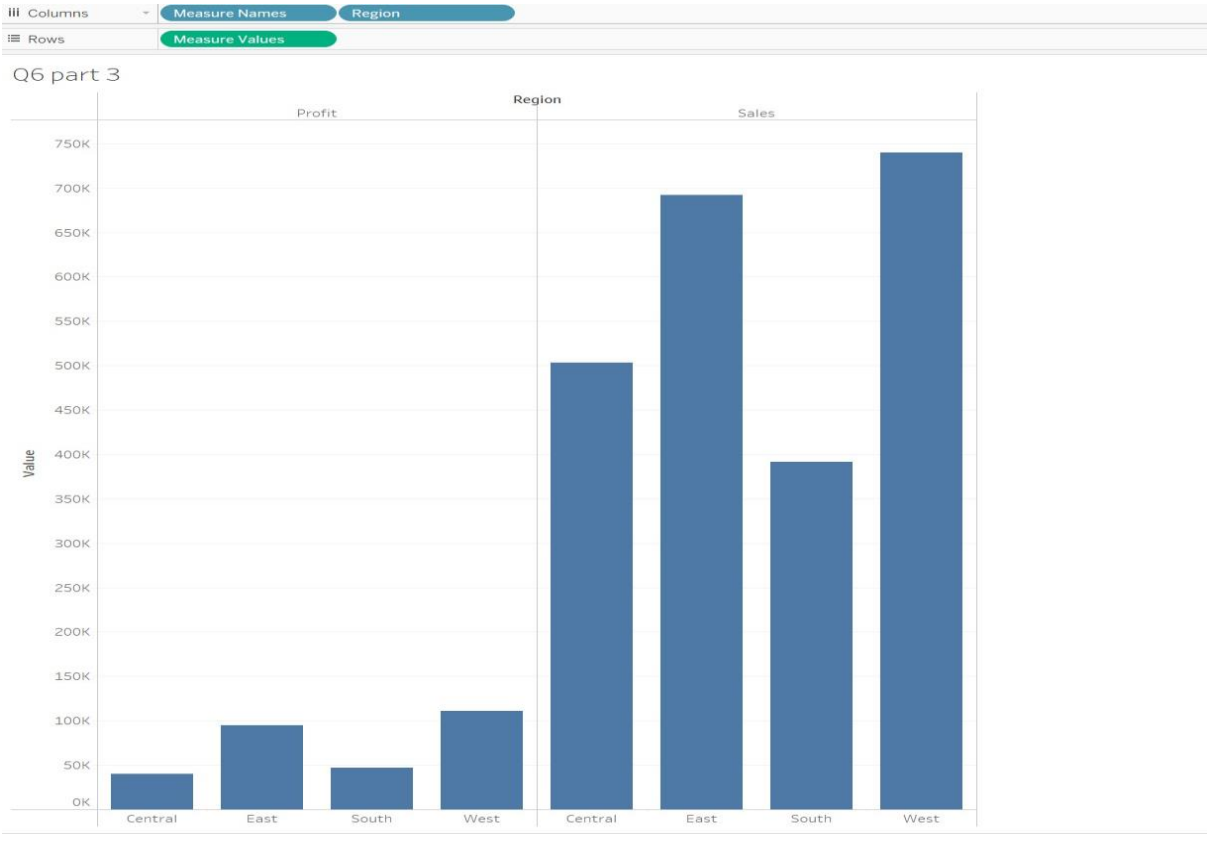
Step 2: KPIs

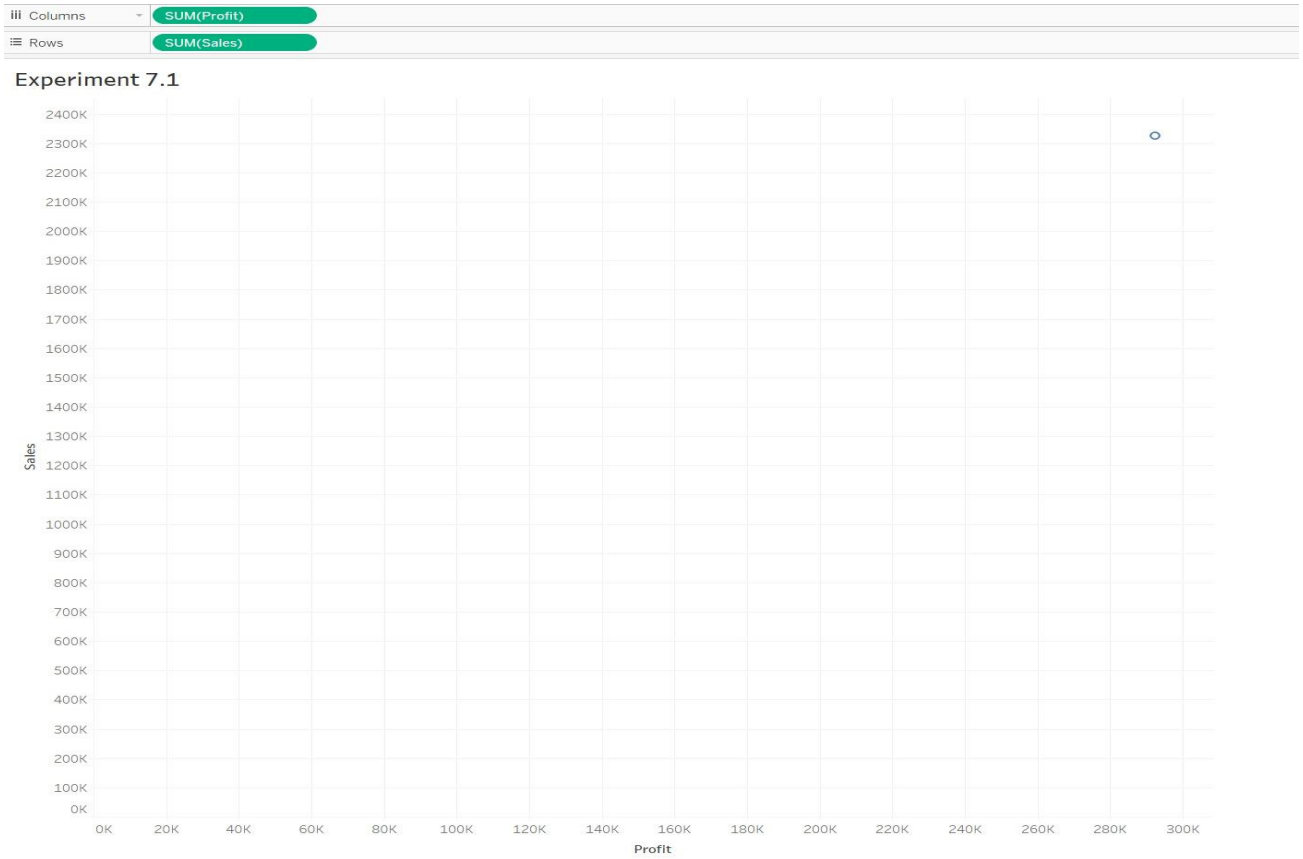
1. **Return Rate KPI**
    - Calculate the percentage of sales returned:
        - Create a calculated field: Return Rate = (Returned Sales / Total Sales) * 100
    - Drag **Product Category** to Rows and the new **Return Rate** field to Columns.
    - Visualize how the return rate varies by **Product Category**.
2. **Sales Growth KPI**
    - Calculate **Sales Growth** (Year-over-Year or Month-over-Month):
        - Create a calculated field: (Current Period Sales - Previous Period Sales) / Previous Period Sales * 100
    - Drag **Order Date** to Columns (set to Year or Month), and **Sales Growth** to Rows to show growth rates over time.

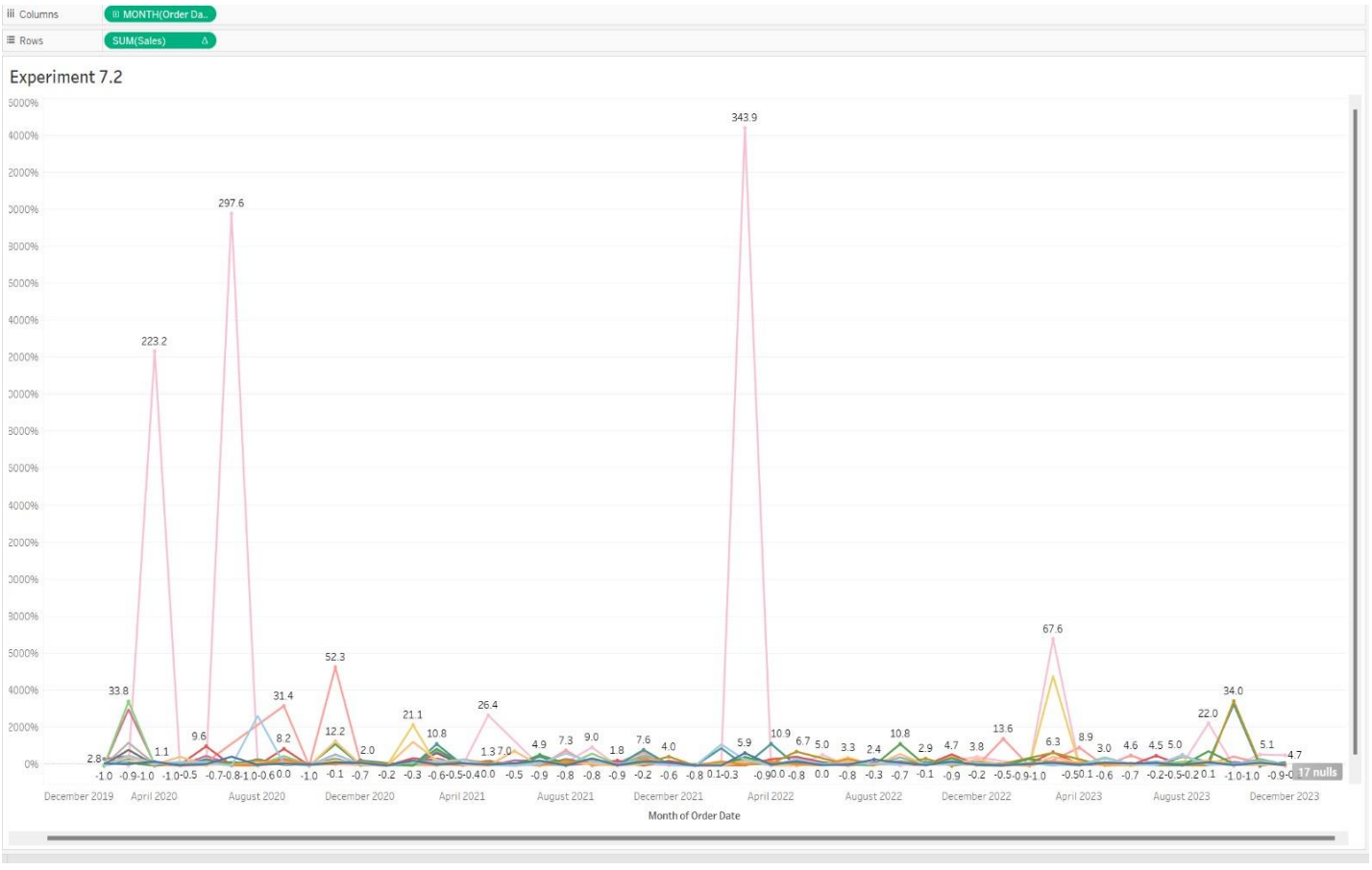

Columns
Product Name
Rows
SUM(Sales)
Q6 part 1
Product Name
Region
Central
East
South
West
Sales
6000
5500
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
Avery Non-Stick Binders
Easy-staple paper
KI Adjustable-Height Ta..
Logitech 910-002974 M..
Staple envelope
Staple remover
Staple-based wall hangi..
Staples
Staples in misc. colors
Storex Dura Pro Binders


Columns
SUM(Sales)
Rows
SUM(Discount)
Q6 part 2
Discount
1600
1500
1400
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0
0K
200K
400K
600K
800K
1000K
1200K
1400K
1600K
1800K
2000K
2200K
2400K
Sales


Columns
MONTH(Order Da..
Rows
SUM(Sales)
SUM(Profit)
Q6 part 4
Sales
Profit
Month of Order Date
November 2019
March 2020
July 2020
November 2020
March 2021
July 2021
November 2021
March 2022
July 2022
November 2022
March 2023
July 2023
November 2023


Columns
Measure Names
Region
Rows
Measure Values
Q6 part 3
Region
Profit
Sales
Value
Central
East
South
West


Columns
SUM(Profit)
Rows
SUM(Sales)
Experiment 7.1
Sales
Profit
0K
100K
200K
300K
400K
500K
600K
700K
800K
900K
1000K
1100K
1200K
1300K
1400K
1500K
1600K
1700K
1800K
1900K
2000K
2100K
2200K
2300K
2400K
0K
20K
40K
60K
80K
100K
120K
140K
160K
180K
200K
220K
240K
260K
280K
300K


Columns
MONTH(Order Da..
Rows
SUM(Sales)
Experiment 7.2
Month of Order Date
December 2019
April 2020
August 2020
December 2020
April 2021
August 2021
December 2021
April 2022
August 2022
December 2022
April 2023
August 2023
December 2023
343.9
297.6
223.2
67.6
52.3
34.0
33.8
31.4
26.4
22.0
21.1
17 nulls