La Guardia Community College

DATA 203
DATA VISUALIZATION USING TABLEAU

Class 2

BONUS QUESTION

Your Executives want to evaluate the performance of the company.

Based on the Office Supply file for analysis -

What insights do you think are they interested in?

BUILD A VISUALIZATION

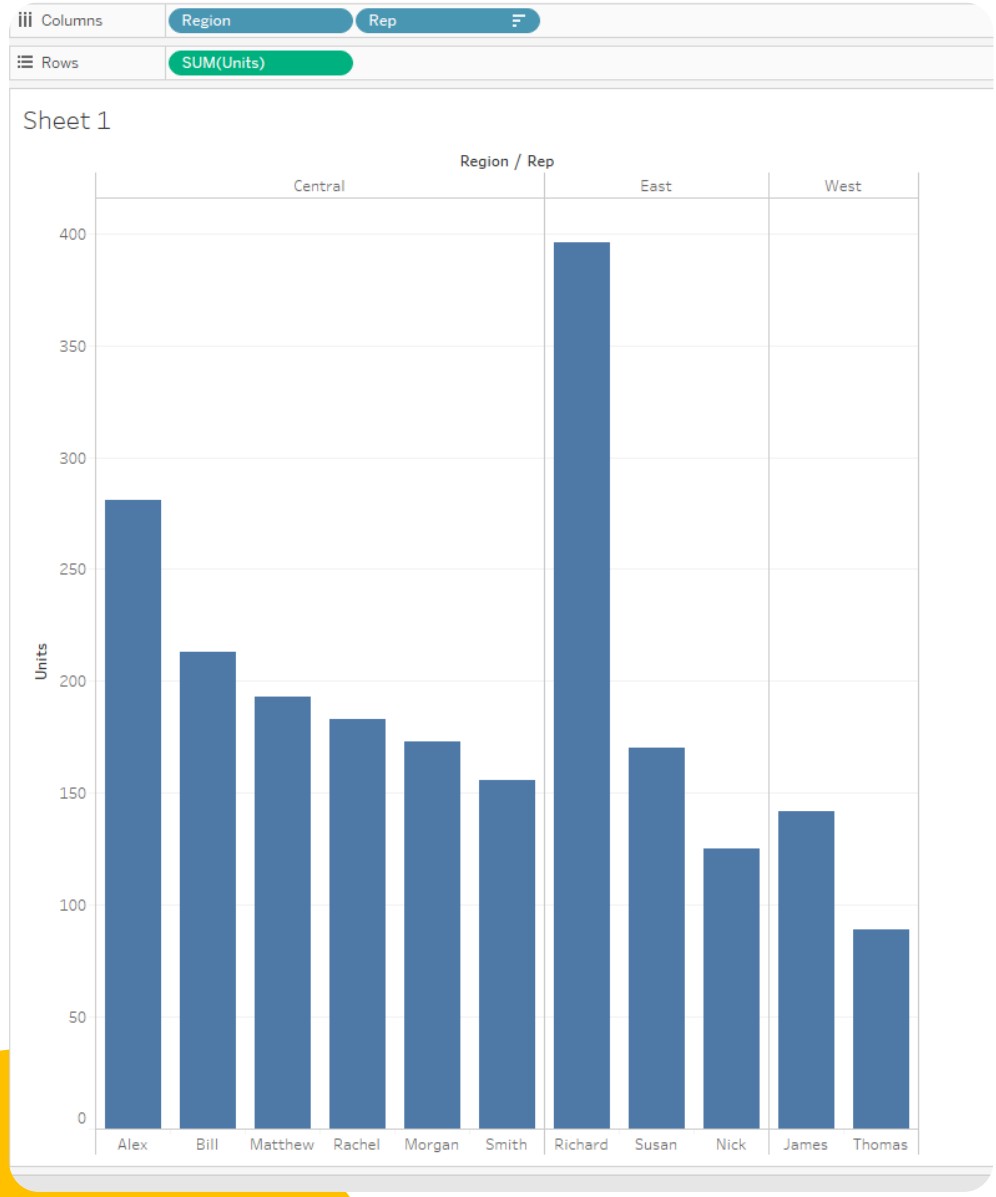
The questions your Executives want to know are -

1. Which **Region** is the most profitable?
2. Which **Rep** has the best sales performance?
3. Which **Item** has the most sales?

BUILD A VISUALIZATION

POTENTIAL QUESTIONS TO ASK

1. Which Rep had the most sales by Region?
2. What is the Sales Performance of Reps over the years?
3. Which Items sells the most by Region?
4. What is the sales performance of the Items over the years?
5. Which Region is the most profitable overall?
6. Which Region had the most unit sold and sales overall?



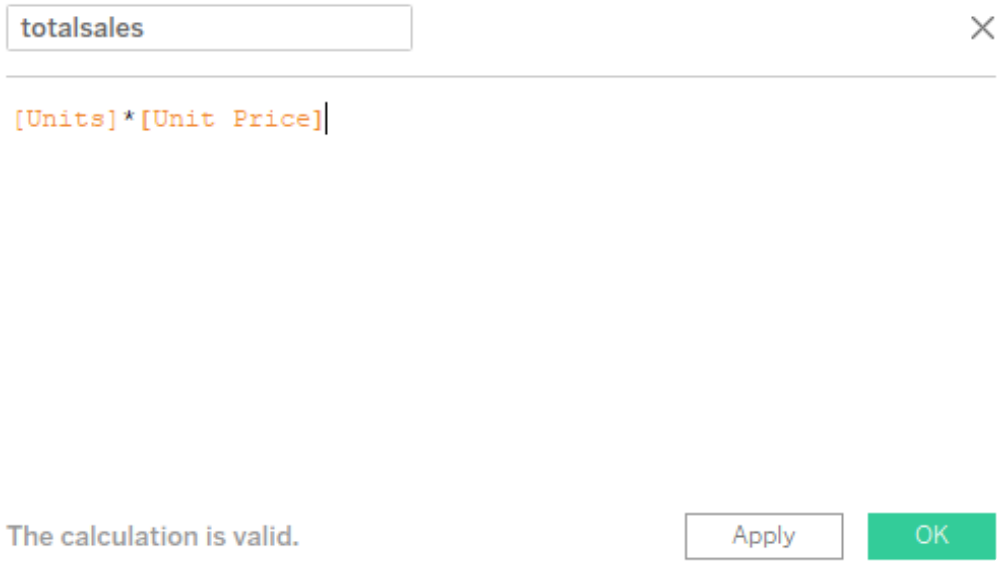
Q1. Which Rep had the most Sales by Region?

- In Class 1 you designed this bar chart.
- If you used Units as instructed, it does not show the total Sales.
- You need to calculate total sales in $$

Q1. Which Rep had the most Sales by Region?

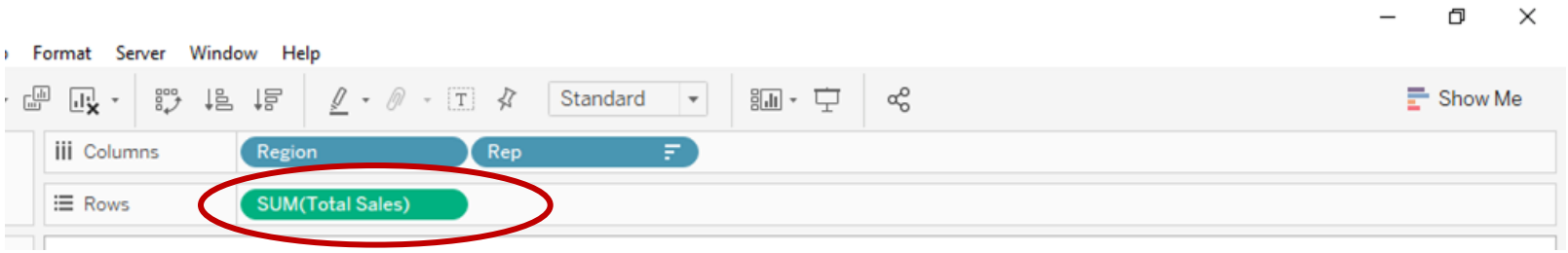
- We can create what's called a **Calculated Field**
- Right Click within the measures window
- Select '**Create calculated field**'
- Name the field – **Total Sales**

Q1. Which Rep had the most Sales by Region?



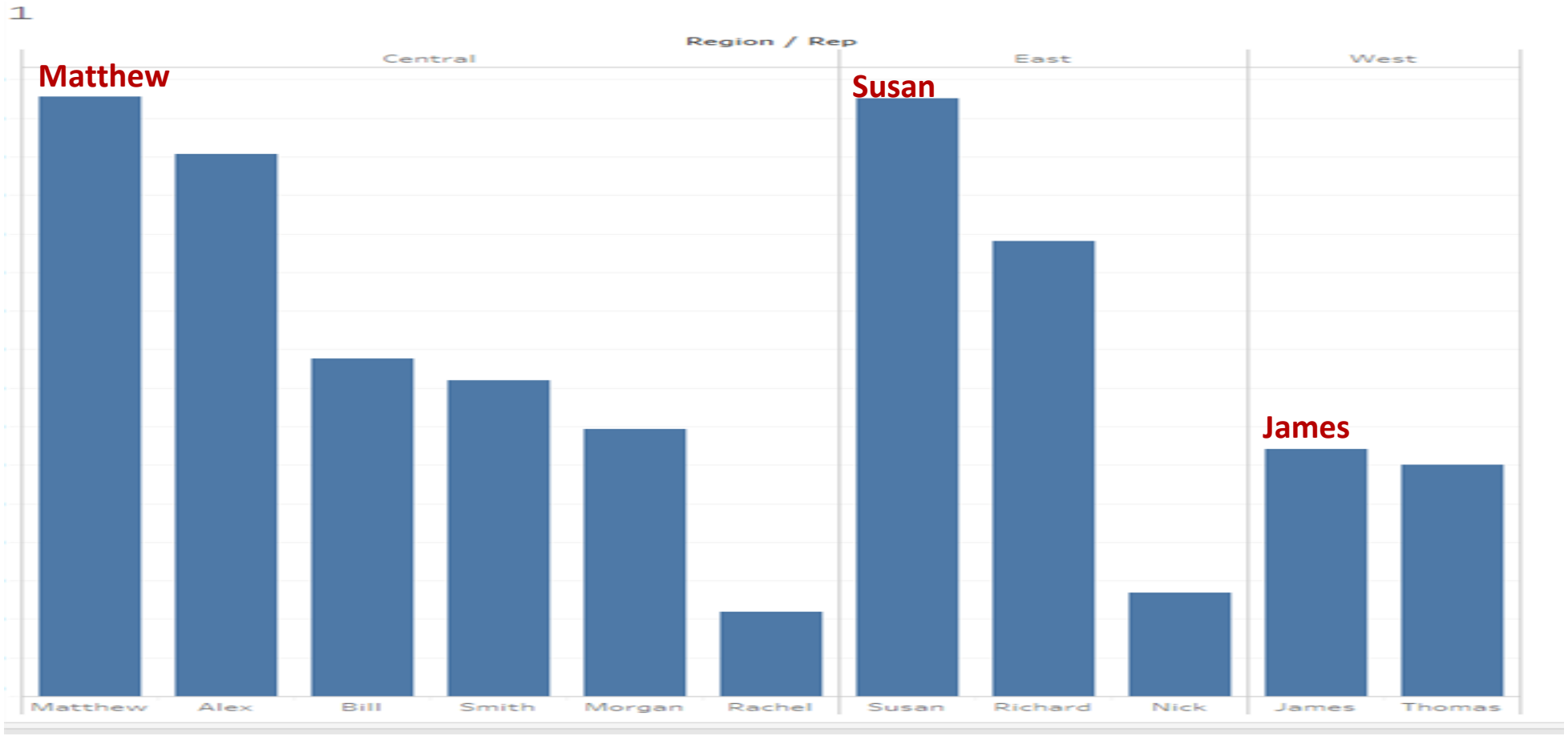
- Calculated Field – Total Sales
- In the body type
- **[Units] * [Unit Price]**

Q1. Which Rep had the most Sales by Region?

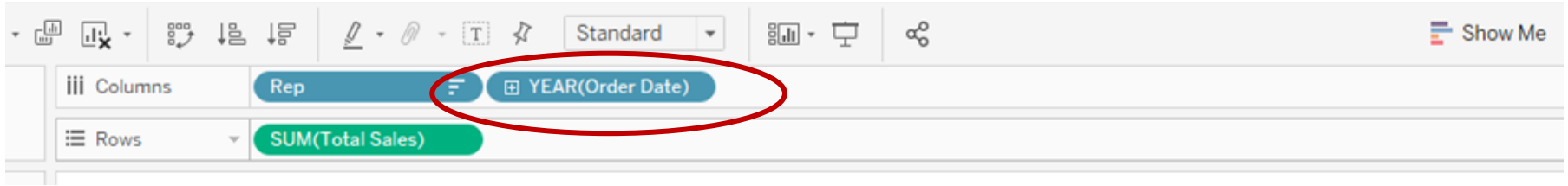


- Replace SUM(Units) with SUM(Total Sales)
- Sort Descending
- Name your worksheet - Rep Sales by Region

Q1. Which Rep had the most Sales ?



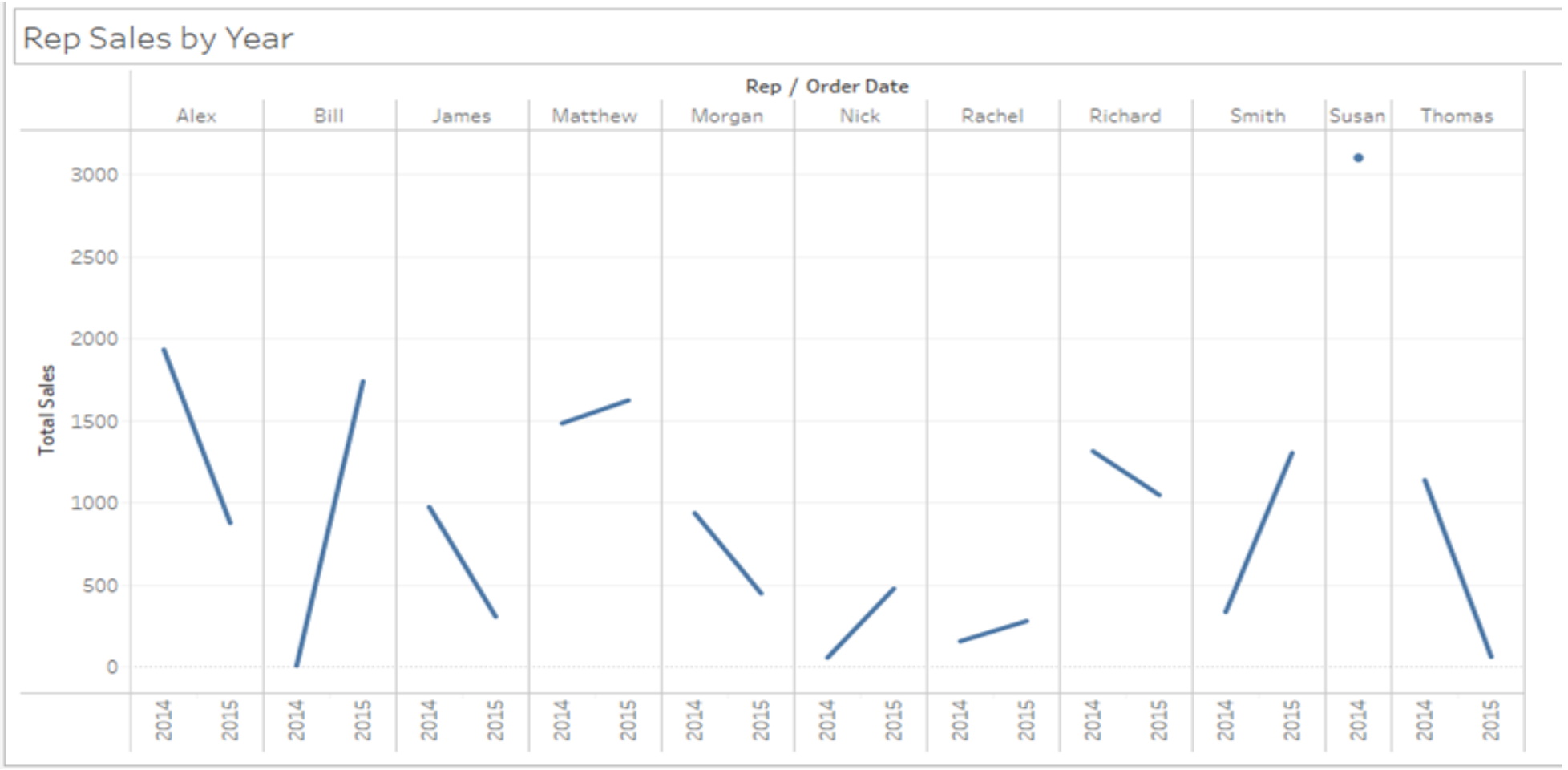
Q2. What is the Sales Performance of the Reps over the Years?



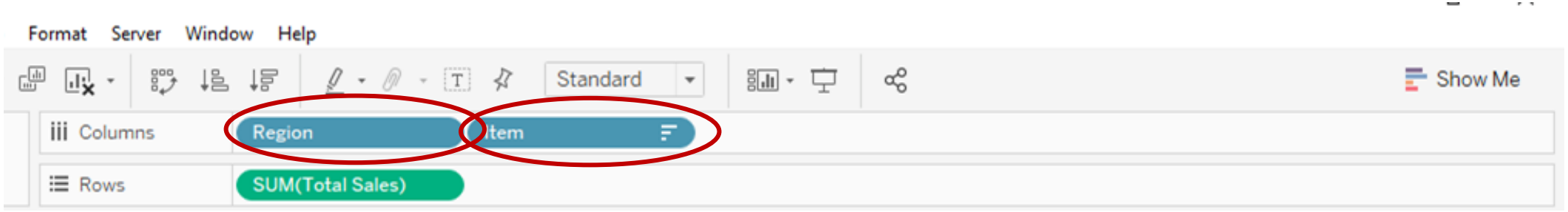
- Duplicate Sheet Rep Sales by Region
- Rename it Rep Sales by Year
- **From Column**
  - Remove Region
  - Add Order Date to Column after Rep
- Sort Descending

Play around with the Order Date – how does the graph change?

Q2. What is the Sales Performance of the Reps over the Years?

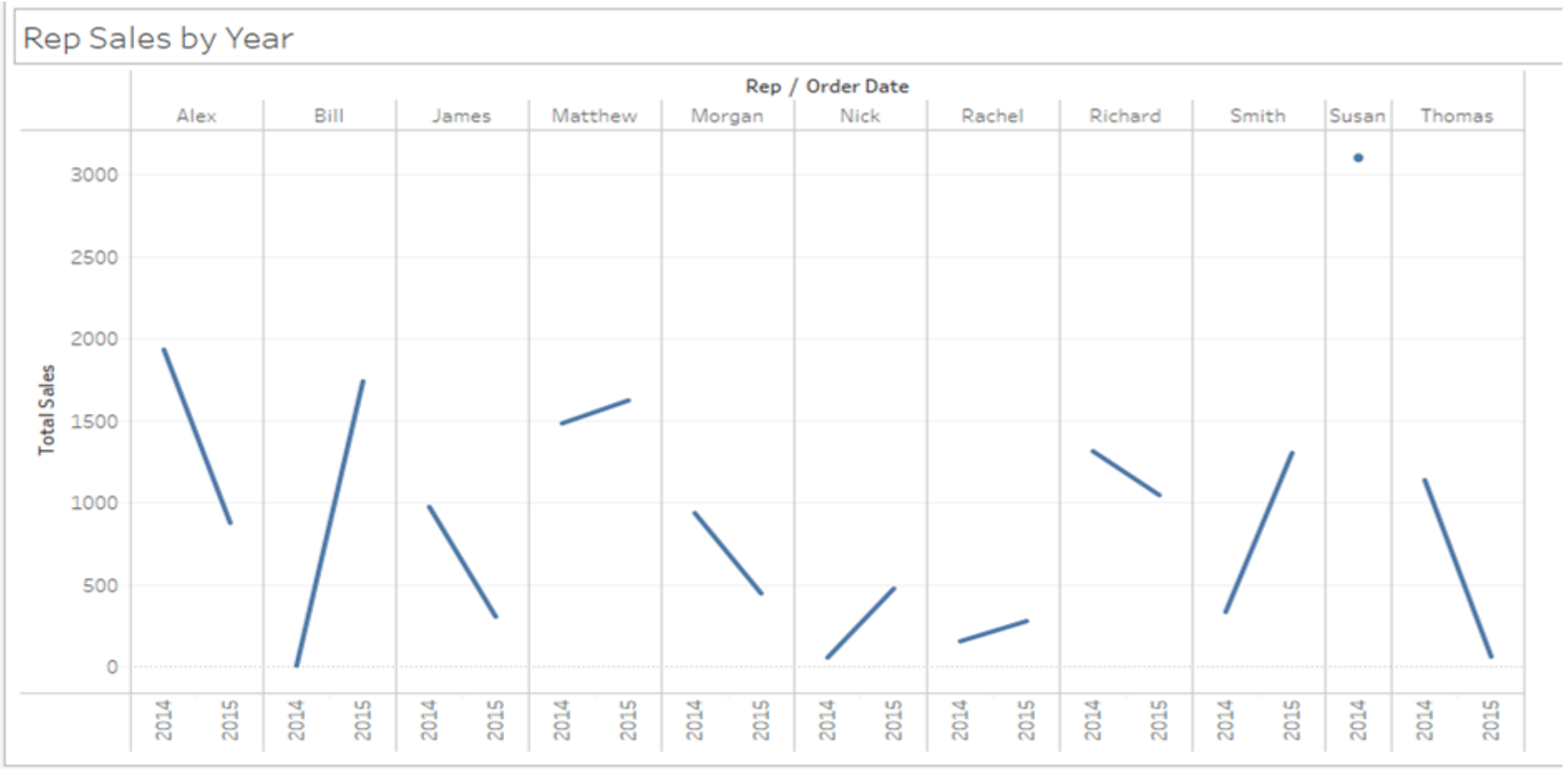


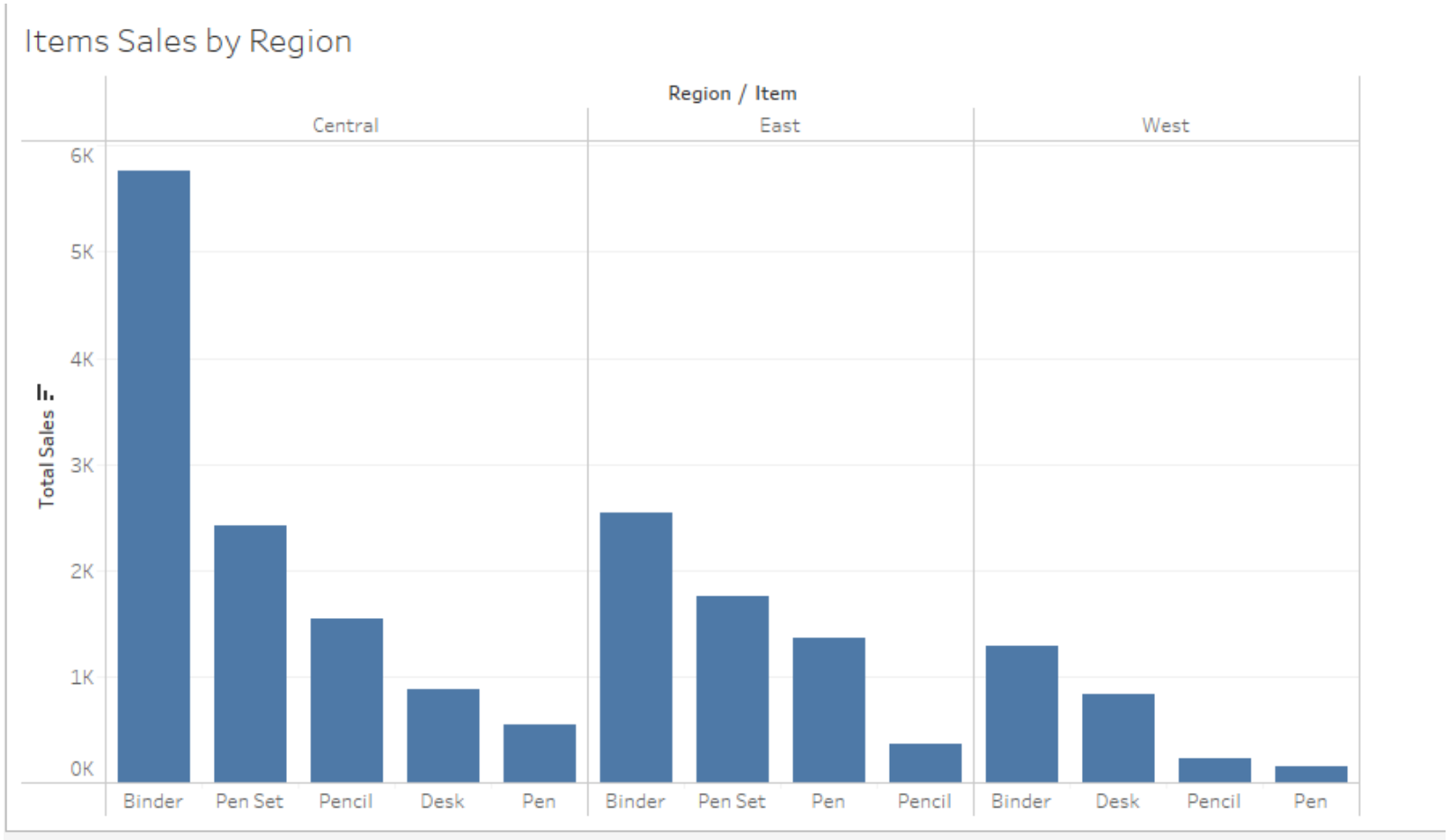
Q3. Which Item sells the most by Region?



- Duplicate Sheet Rep Sales by Region
- Rename it Item Sales by Region
- **From Column**
  - Remove Rep and Order Date
  - Add Region and Items
- Sort Descending

Q2. What is the Sales Performance of the Reps over the Years?





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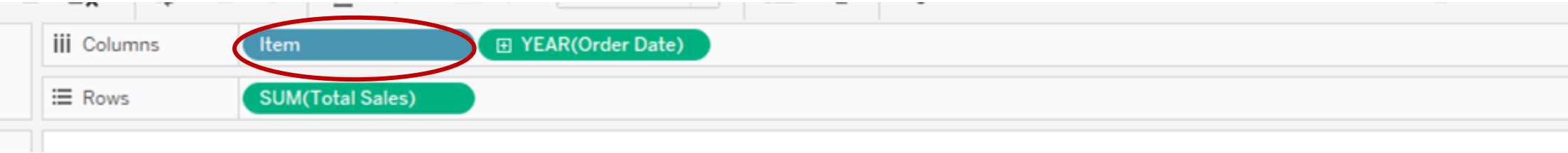
Q4. Which is the Sales Performance of Items over the Years?



- Duplicate Sheet Rep Sales by Year
- Rename it Item Sales by Year
- **From Column**
  - Remove Rep
  - Add Items
- Sort Descending

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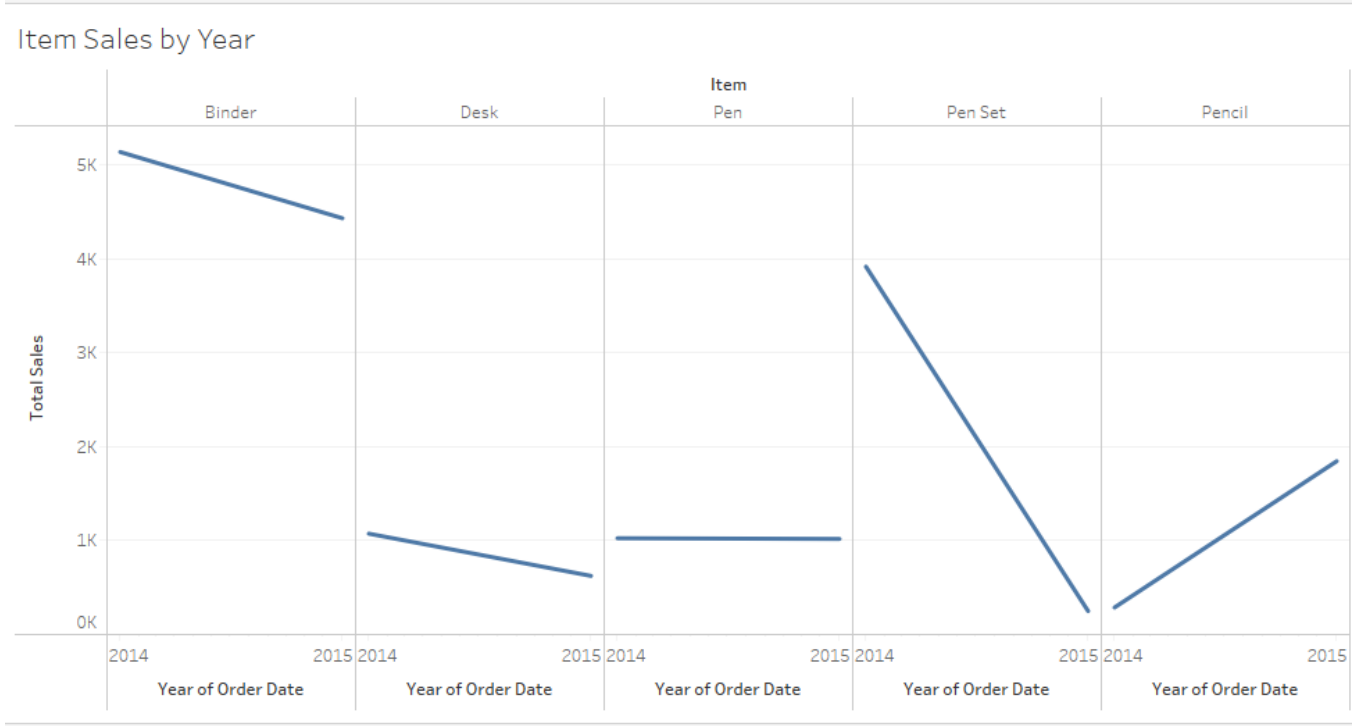
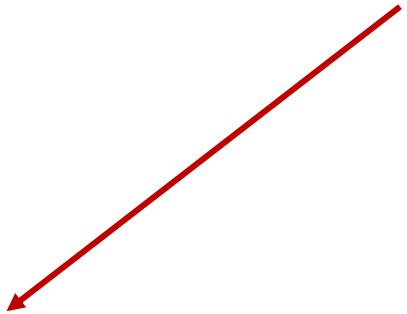


BONUS QUESTION

- **Change the current graph from five graphs to one graph**

Q4. Which is the Sales Performance of Items over the Years?



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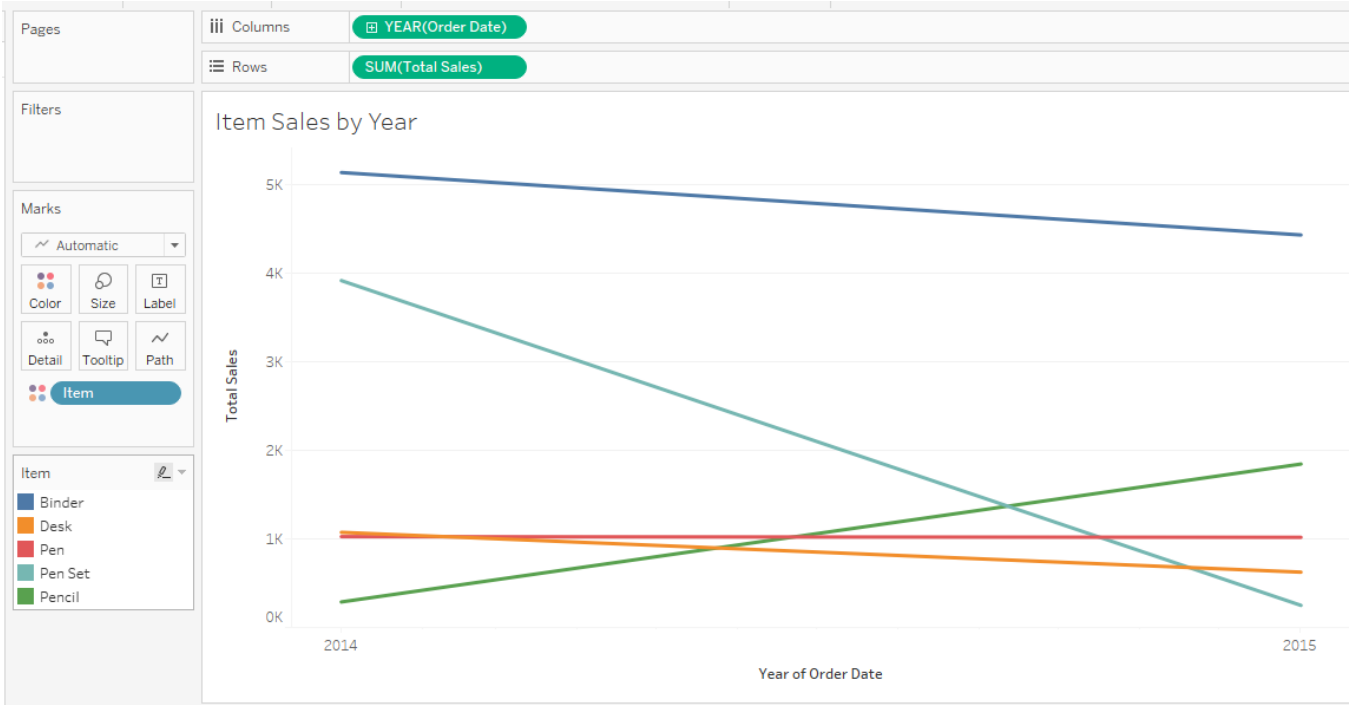
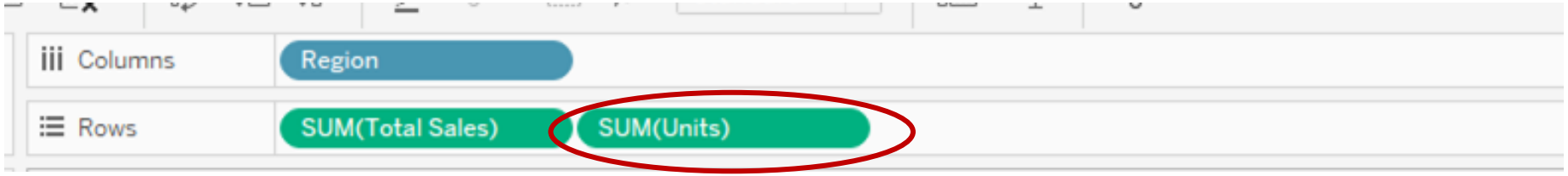
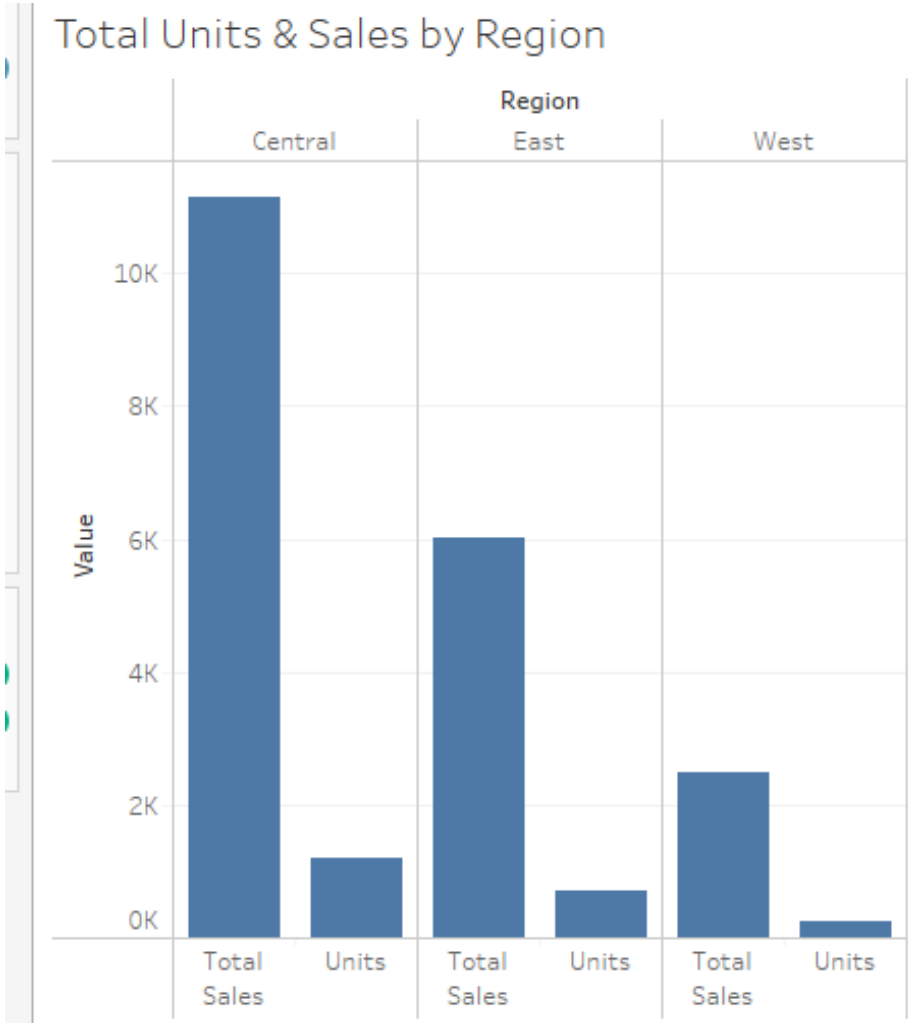


Q5. Which Region is the most profitable?



- Duplicate Sheet Item Sales by Region
- Rename it Total Units & Sales by Region
- **From Column**
  - Remove Items
- **In Row**
  - Add Units
- Create a side by side bar chart
- Change the color of the Unit and Sales bars

Q5. Which Region is the most profitable?



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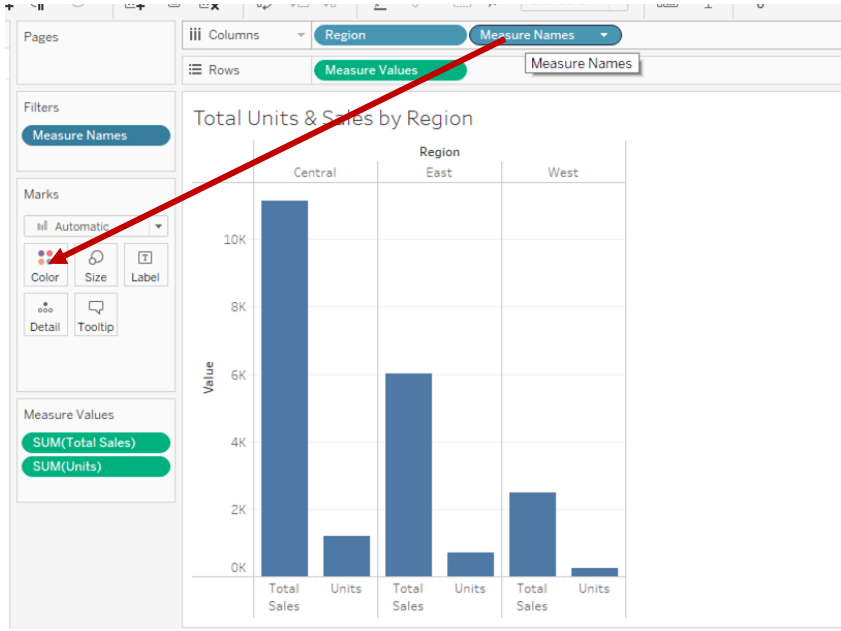
Change the color of the Unit and Sales bars



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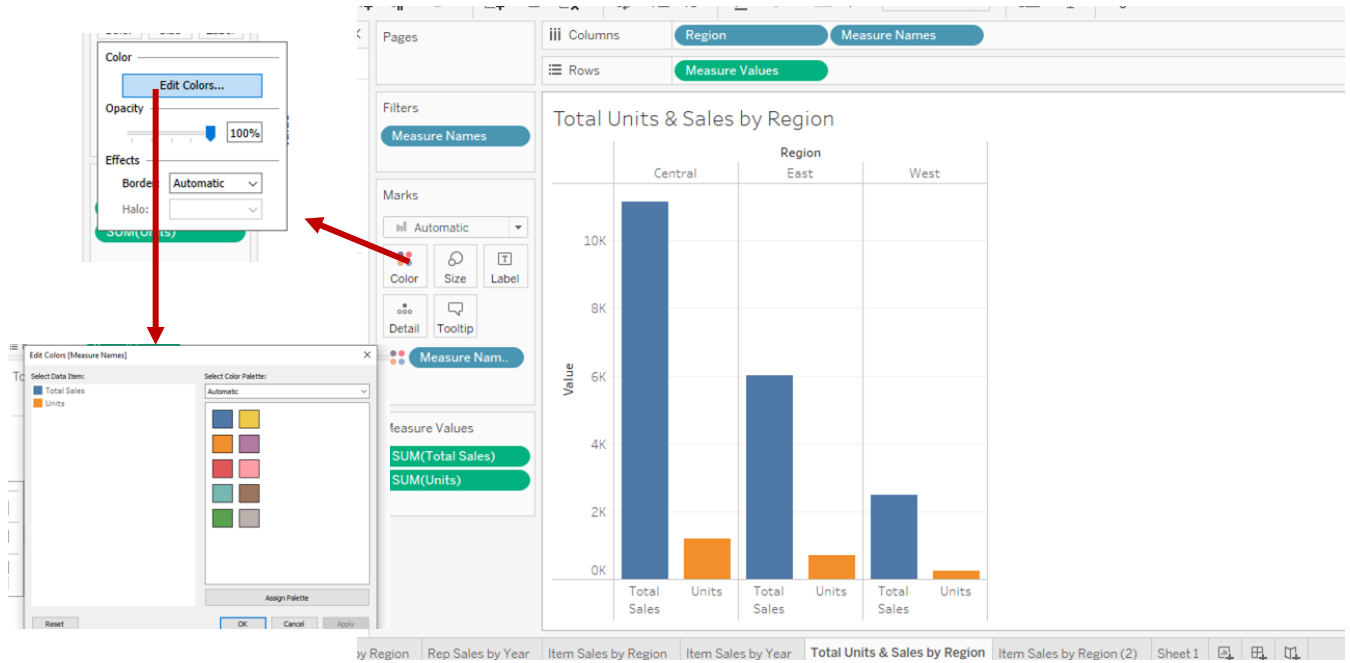

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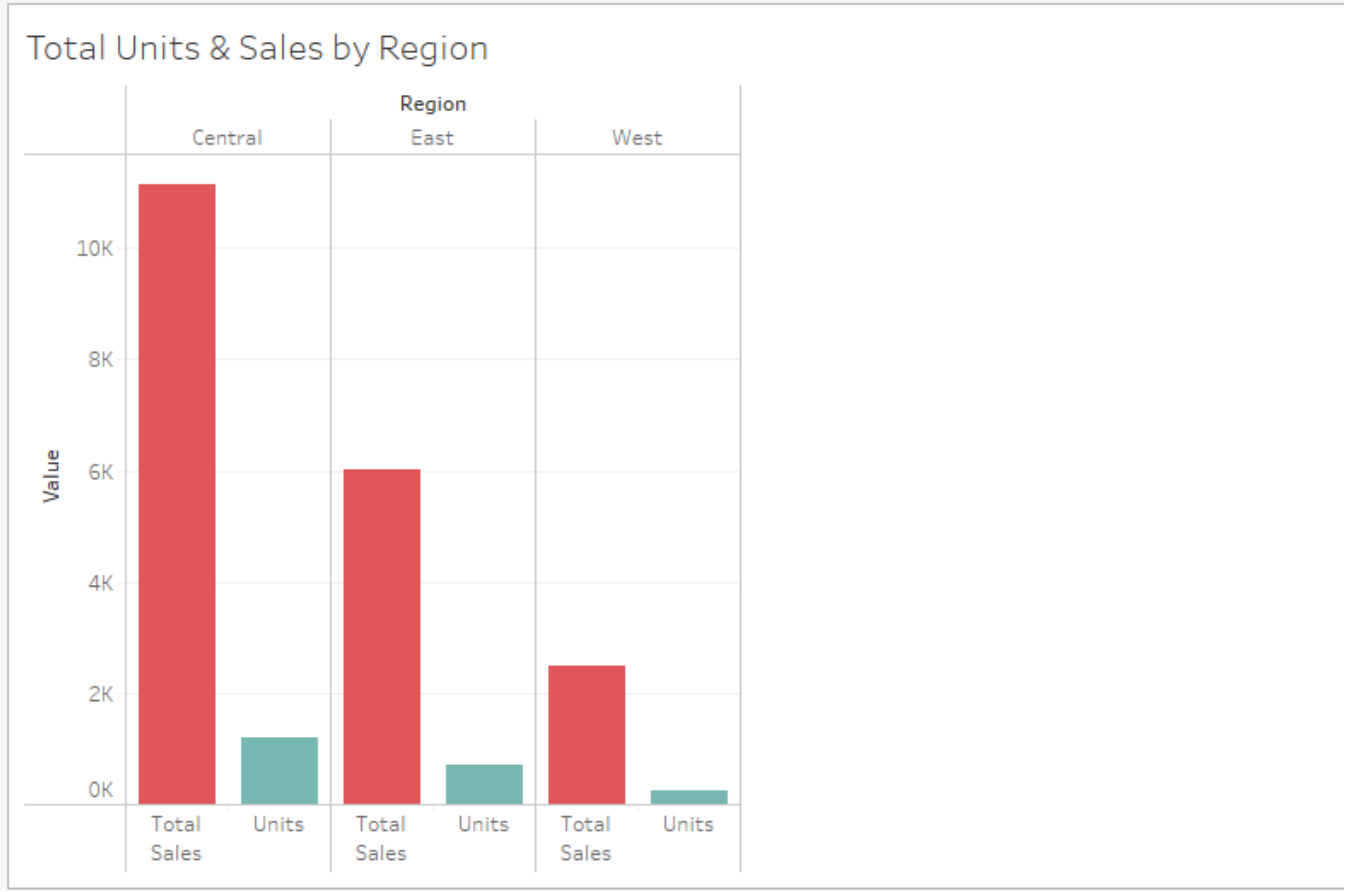


Q6. Which Region had the most Units sold and Sales ?

TreeMaps - Visualization for hierarchical data

- Used for exploratory data analysis especially with large data set.
- Made of a series of nested rectangles of sizes proportional to the corresponding data value.
- A large rectangle represents a branch of a data tree, and it is subdivided into smaller rectangles that represent the size of each node within that branch.

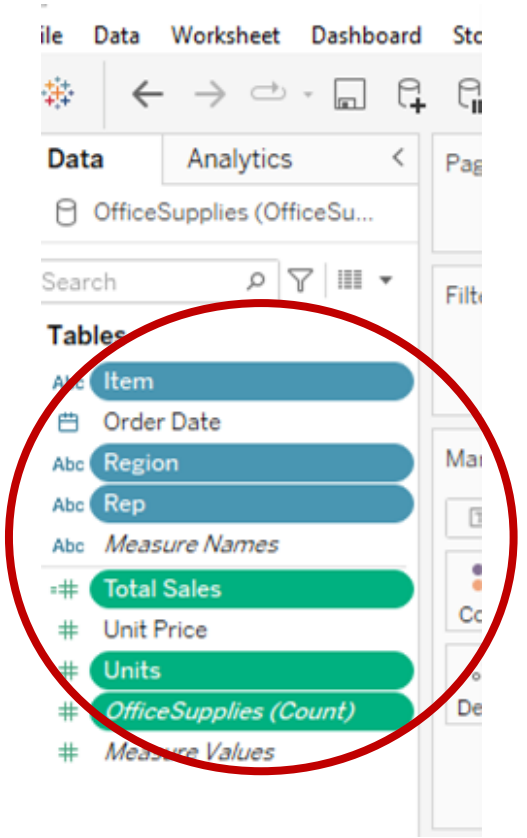
Q6. Which Region had the most Units sold and Sales ?

In TreeMaps

- Dimension values define the **structure** of the treemap
  - Rectangle, Square, etc
- Measure values define the **size** of the structure or the boxes.

Q6. Which Region had the most Units sold and Sales ?

- Use a New Sheet
- Rename it Region Most Sale
- Dimensions
  - Select All except Order Date
- Measures
  - Select All except Unit Price



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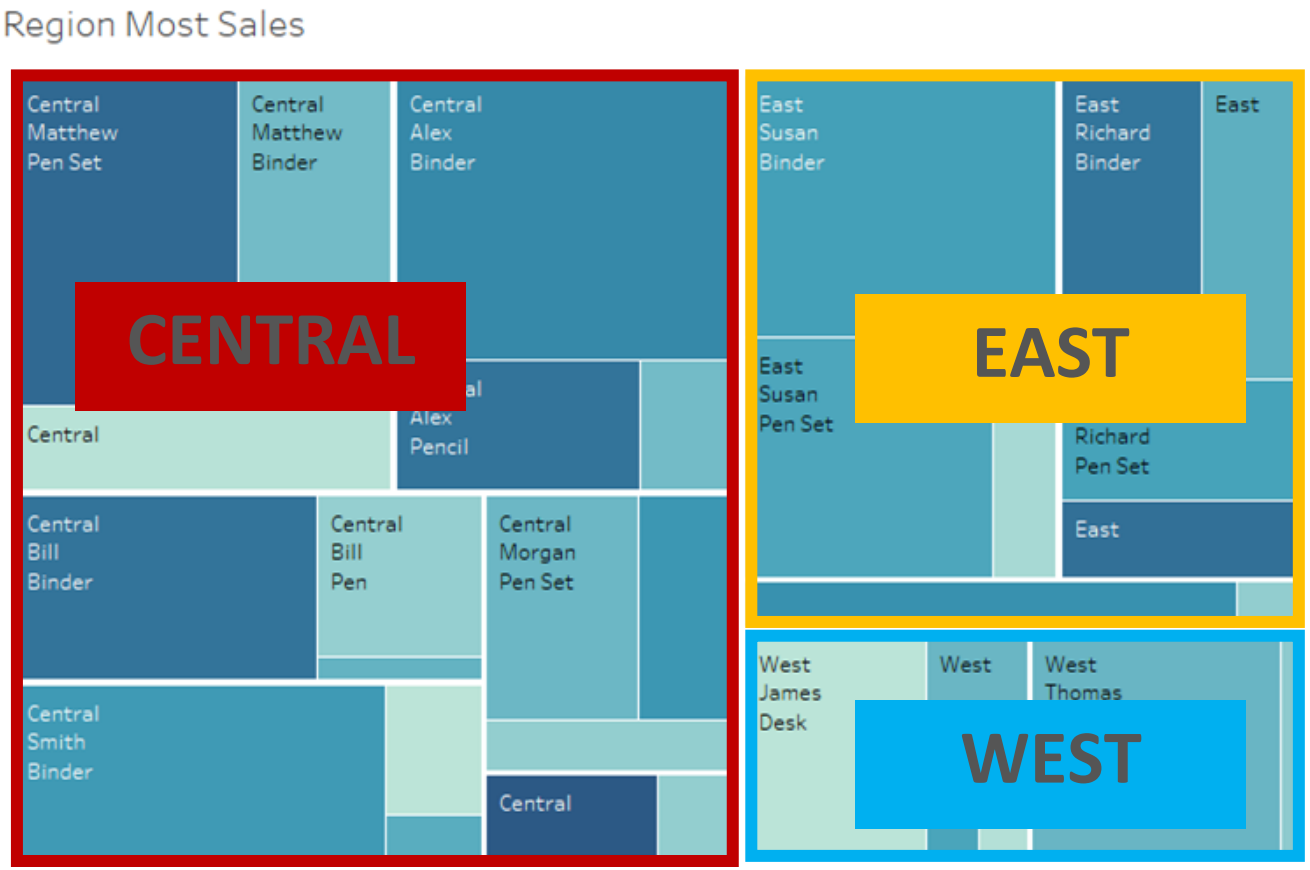

Class Hands On

Use Data File - TFL Bus Safety

Data Problem	• List the Statement Problem you want to answer • List 4 questions that would help you address your Statement Problem
Data Visualization	• Create 1 charts per question above
Data Analysis	• Please provide one paragraph analysis based on your data visualizations.