

EXP.NO:7.	Perform data Analysis with Pivot Tables and Charts	Name:
DATE:		Roll no:

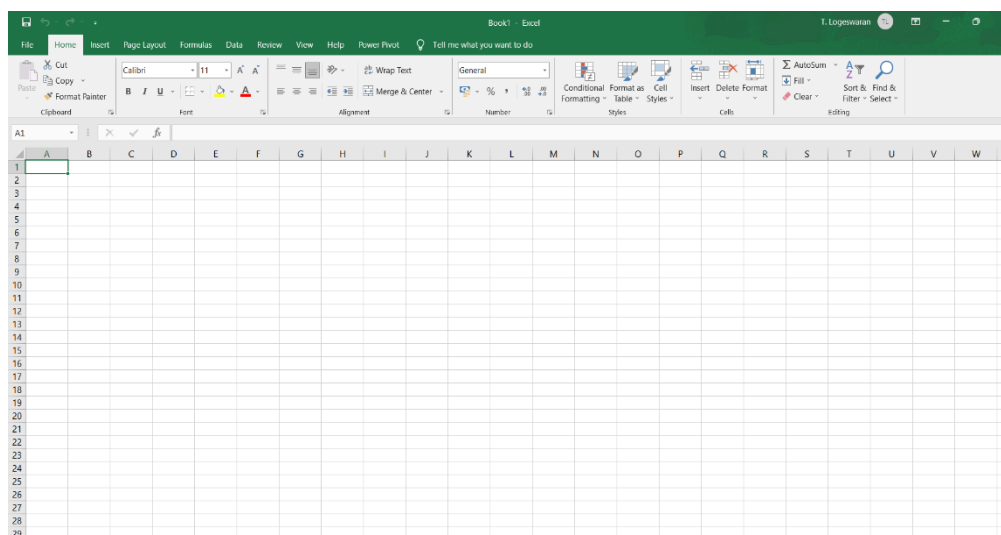
AIM:

To demonstrate the data analysis with pivot tables and charts using Power Pivot in Excel.

PROCEDURE:

STEP 1:

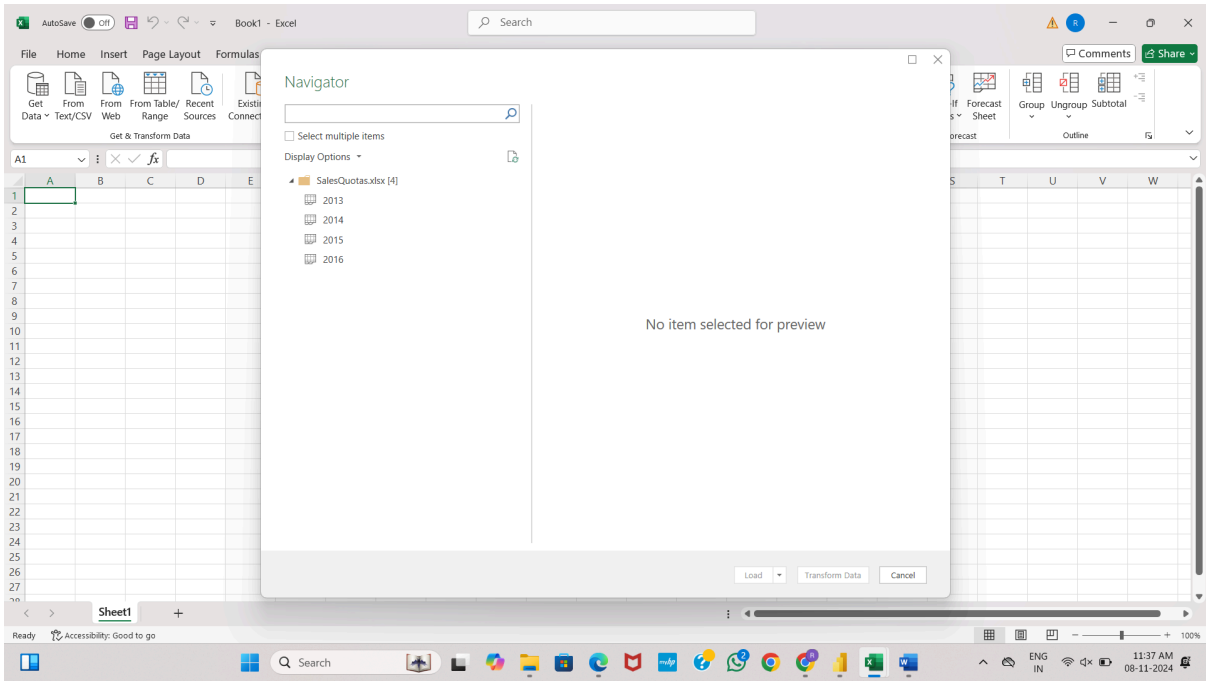
Open Excel and create a blank spreadsheet.



STEP 2:

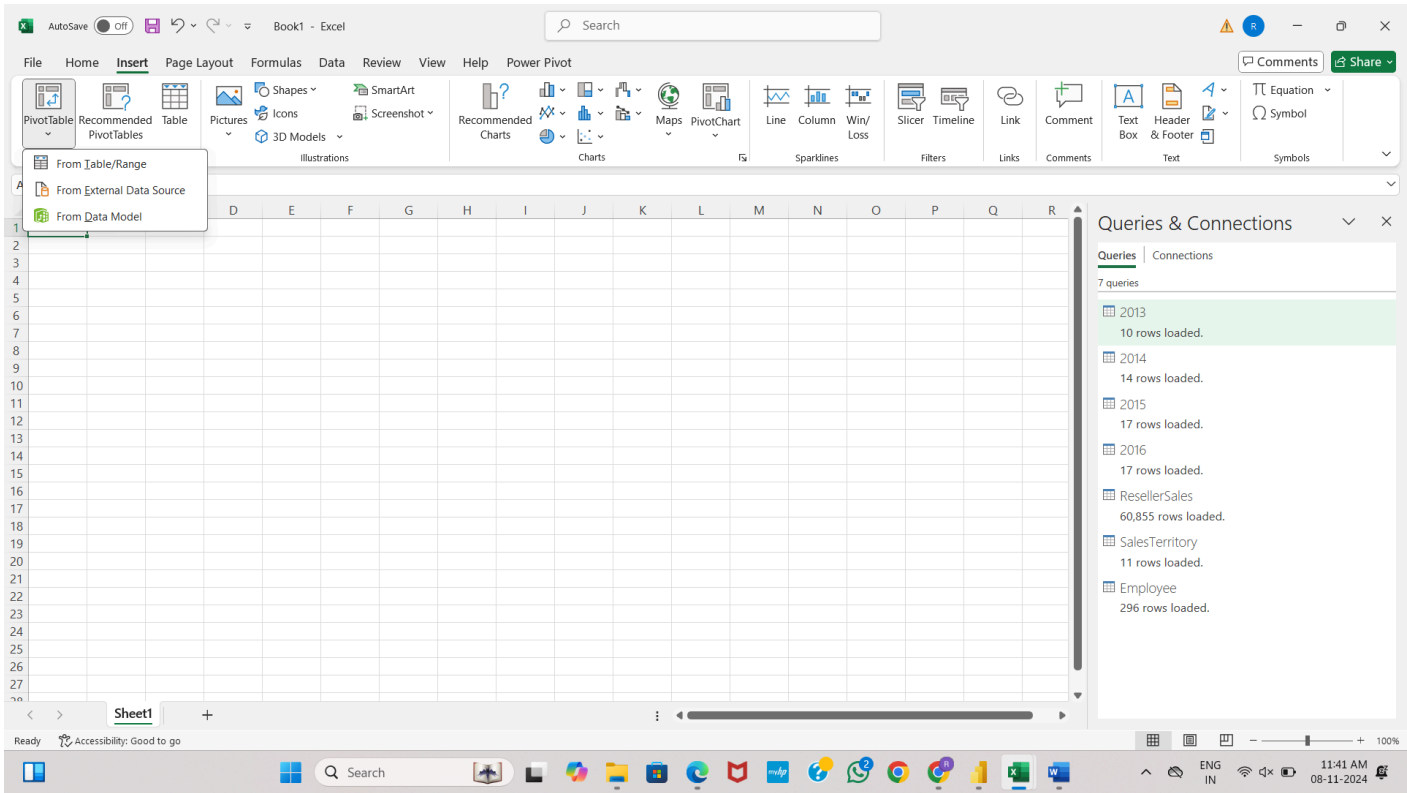
In the LabStarterFiles\Chapter11Lab1 folder, open the Chapter11Lab1.xlsx file.

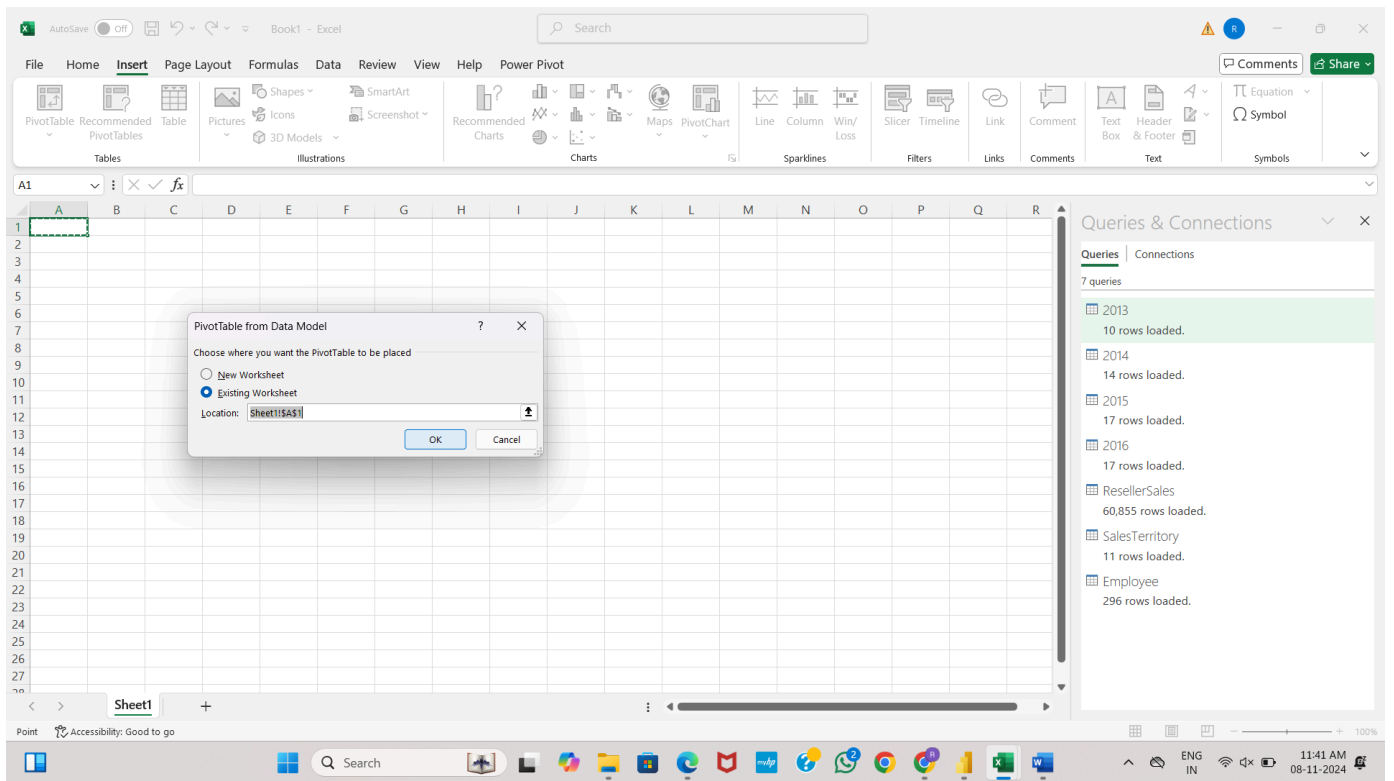
This file contains inventory and sales data from the test Adventure Works DW database.



STEP 3:

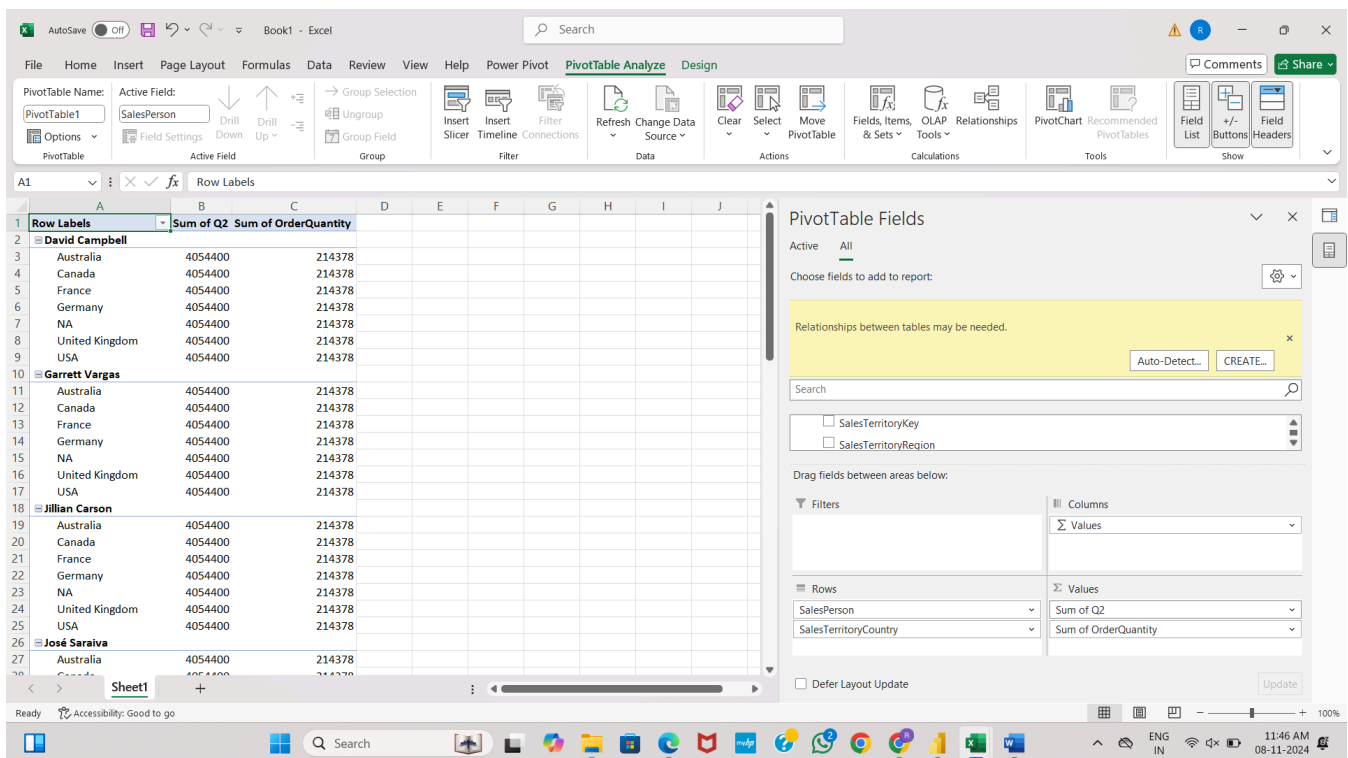
In Excel Sheet1, insert a Power Pivot table using the PivotTable button on the Insert tab. Make sure the Use this workbook's Data Model is selected. If the PivotTable button is not visible, click the Table button first.





STEP 4:

Add Total Quantity, sumofQ2, and SUM of order Quantity from the Reseller Sales table to the Values drop area in the Field List window. Add the Calendar hierarchy to the Rows drop area.



STEP 5:

Note that some of the margins are negative. To bring attention to the negative values, format them in red.

Excel interface showing a PivotTable and the Highlight Cells Rules task pane.

PivotTable Data:

Row Labels	Sum of Q2	Sum of OrderQuantity
David Campbell		
Australia	4054400	214378
Canada	4054400	214378
France	4054400	214378
Germany	4054400	214378
NA	4054400	214378
United Kingdom	4054400	214378
USA	4054400	214378
Garrett Vargas		
Australia	4054400	214378
Canada	4054400	214378
France	4054400	214378
Germany	4054400	214378
NA	4054400	214378
United Kingdom	4054400	214378
USA	4054400	214378
Jillian Carson		
Australia	4054400	214378
Canada	4054400	214378
France	4054400	214378
Germany	4054400	214378
NA	4054400	214378
United Kingdom	4054400	214378
USA	4054400	214378
José Saraiva		
Australia	4054400	214378

Highlight Cells Rules Task Pane:

- Highlight Cells Rules
- Top/Bottom Rules
- Data Bars
- Color Scales
- Icon Sets
- New Rule...
- Clear Rules
- Manage Rules...

Manage Rules Dialog:

- SalesTerritoryKey
- SalesTerritoryRegion
- Drag fields between areas below:
- Filters: (empty)
- Columns: Σ Values
- Rows: SalesPerson, SalesTerritoryCountry
- Σ Values: Sum of Q2, Sum of OrderQuantity
- Defer Layout Update
- Update

Excel interface showing the New Formatting Rule dialog box and the PivotTable Fields task pane.

New Formatting Rule Dialog:

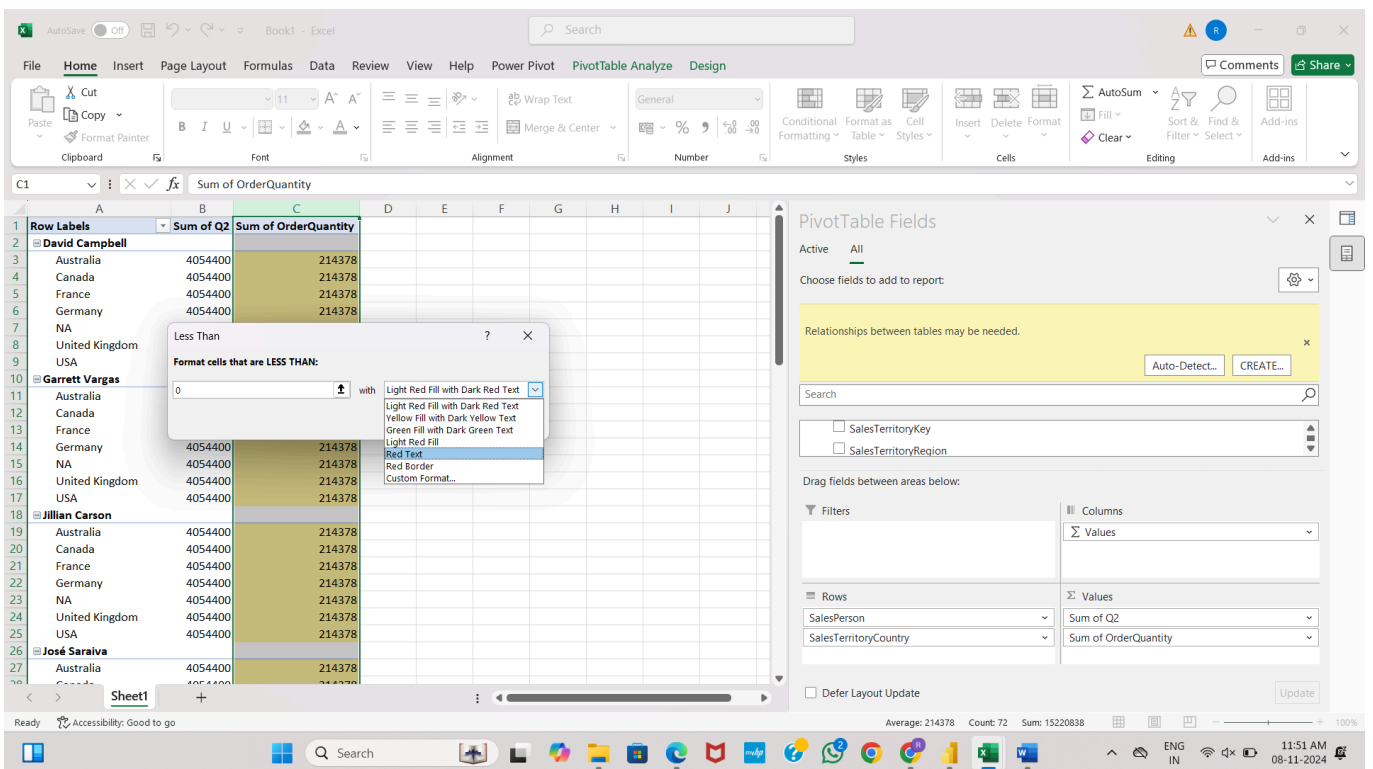
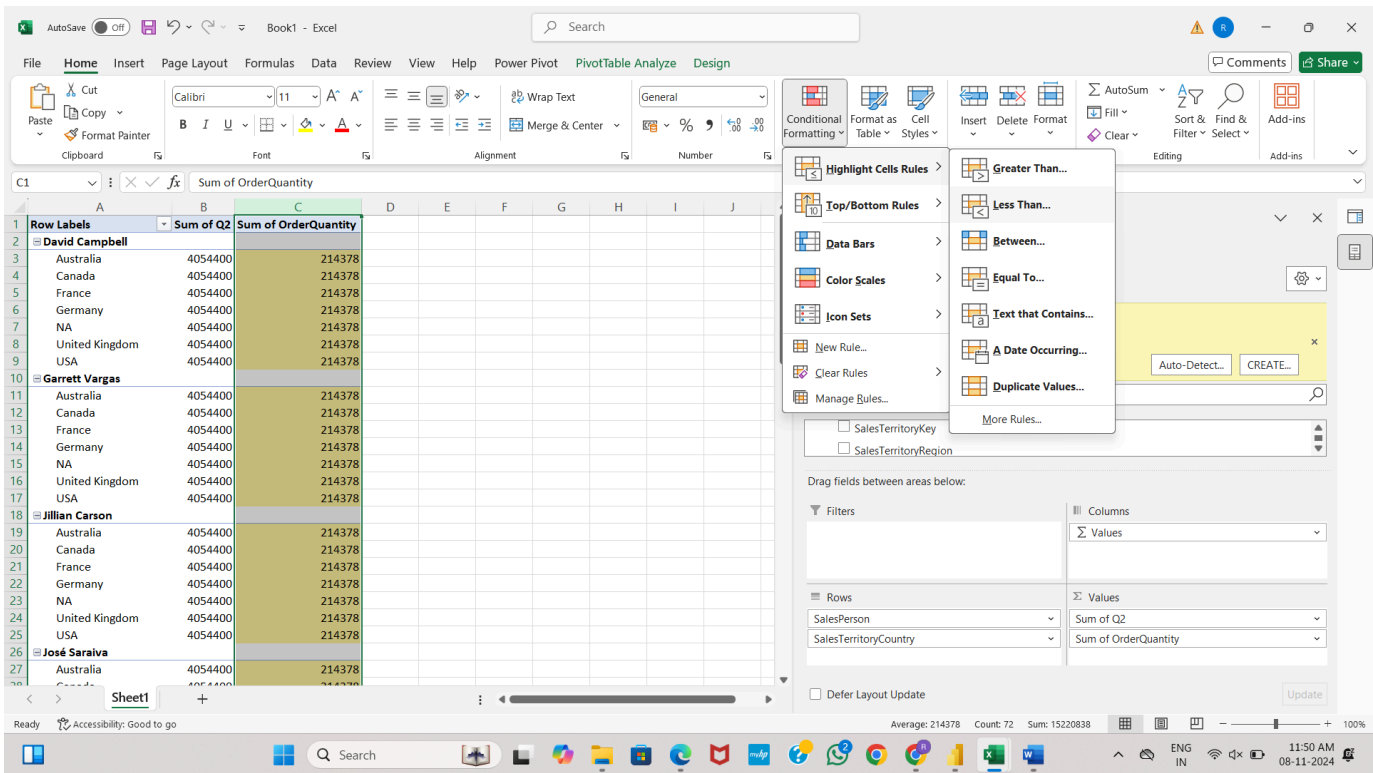
- Select a Rule Type: Format all cells based on their values
- Format only cells that contain
- Format only top or bottom ranked values
- Format only values that are above or below average
- Format only unique or duplicate values
- Use a formula to determine which cells to format
- Edit the Rule Description: Format all cells based on their values
- Format Style: 2-Color Scale
- Minimum: Type: Lowest Value, Value: (Lowest value), Color: (Red)
- Maximum: Type: Highest Value, Value: (Highest value), Color: (Yellow)
- Preview: (Color scale from red to yellow)
- OK, Cancel

PivotTable Fields Task Pane:

- Active: All
- Choose fields to add to report:
- Relationships between tables may be needed.
- Search: (empty)
- SalesTerritoryKey, SalesTerritoryRegion
- Drag fields between areas below:
- Filters: (empty)
- Columns: Σ Values
- Rows: SalesPerson, SalesTerritoryCountry
- Σ Values: Sum of Q2, Sum of OrderQuantity
- Defer Layout Update
- Update

STEP 6:

Select a sum of Order Quantity cell in the pivot table. On the Home tab, click the Conditional Formatting drop-down. Select the Highlight Cells, Less Than option. Format the cells that are less than 0 with red text



STEP 7:

Select one of the sum of Q2. This time select the Data Bars under the Conditional Formatting drop-down. Select one of the gradient styles. After selecting the data bar, small icon next to the values will be viewed. Click it and select the All Cells Showing Sum of order of quantity Values.

The screenshot shows the Microsoft Excel interface with a PivotTable and the PivotTable Fields task pane. The PivotTable is located in the range C1:J27 and has the following data:

Row Labels	Sum of Q2	Sum of OrderQuantity
David Campbell		
Australia	4054400	214378
Canada	4054400	214378
France	4054400	214378
Germany	4054400	214378
NA	4054400	214378
United Kingdom	4054400	214378
USA	4054400	214378
Garrett Vargas		
Australia	4054400	214378
Canada	4054400	214378
France	4054400	214378
Germany	4054400	214378
NA	4054400	214378
United Kingdom	4054400	214378
USA	4054400	214378
Jillian Carson		
Australia	4054400	214378
Canada	4054400	214378
France	4054400	214378
Germany	4054400	214378
NA	4054400	214378
United Kingdom	4054400	214378
USA	4054400	214378
José Saraiva		
Australia	4054400	214378
Canada	4054400	214378
France	4054400	214378
Germany	4054400	214378
NA	4054400	214378
United Kingdom	4054400	214378
USA	4054400	214378

The PivotTable Fields task pane on the right shows the following configuration:

- Active:** All
- Choose fields to add to report:** Relationships between tables may be needed. (Auto-Detect... CREATE...)
- Search:** (Search bar)
- Drag fields between areas below:**
 - Filters:** (Empty)
 - Columns:** Values
 - Rows:** SalesPerson, SalesTerritoryCountry
 - Values:** Sum of Q2, Sum of OrderQuantity
- Defer Layout Update:** (Unchecked)

The status bar at the bottom shows: Average: 214378, Count: 72, Sum: 15220838. The task pane also shows a small icon next to the values, which is the 'Show Values As' icon.

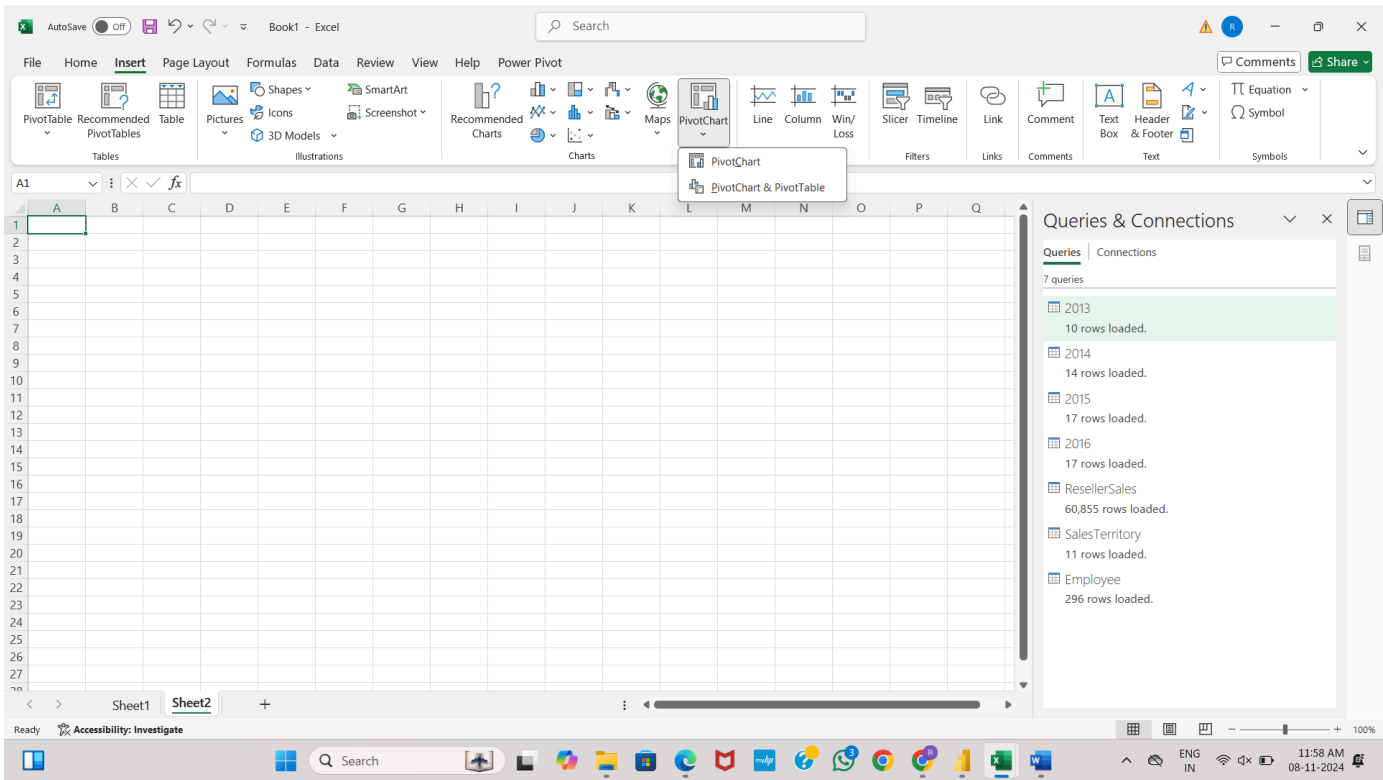
STEP 8:

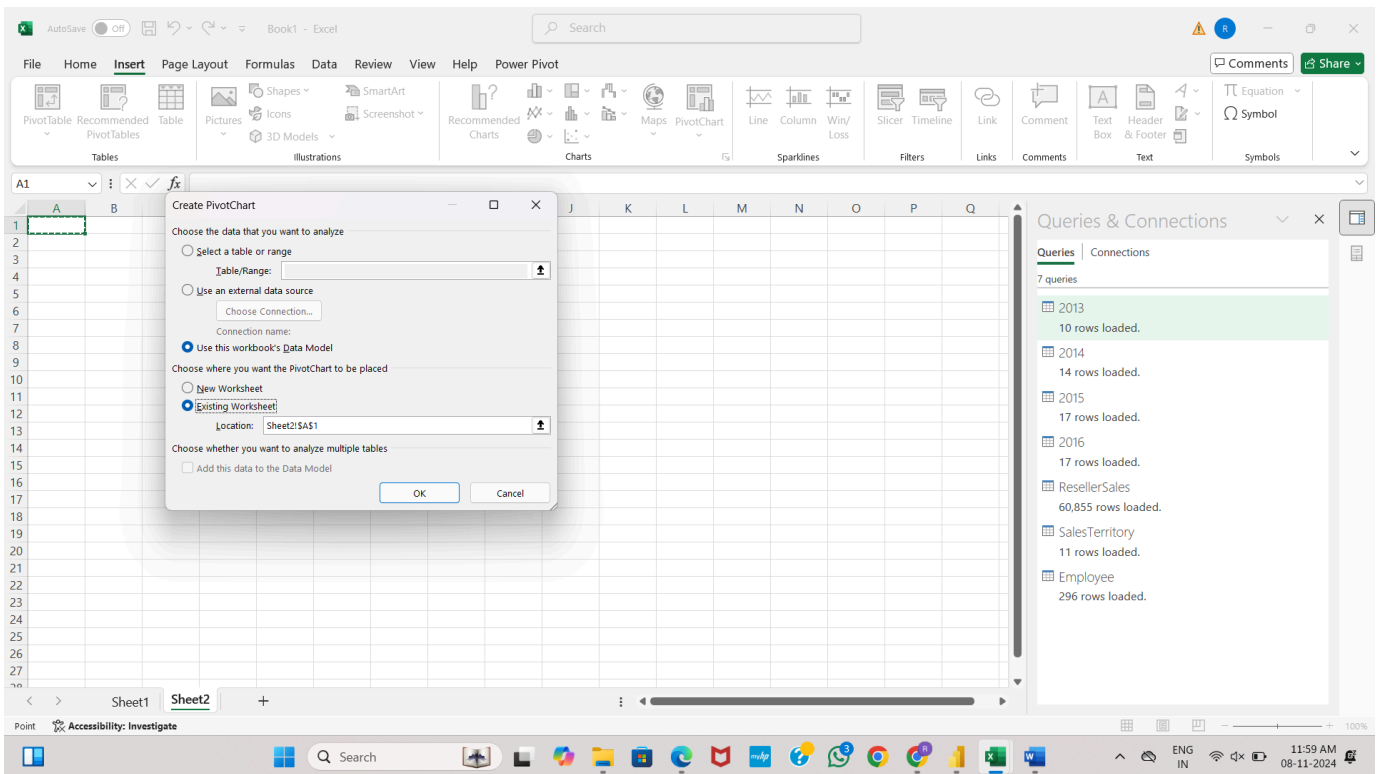
When finished, an icon next to the selected cell will be viewed. Click it and select the All Cells Showing Total order of quantity Values option.

Column Labels		
2000		
Qtr3		
Jul		
Row Labels	Sum of Q2	Sum of OrderQuantity
David Campbell		
Australia	4054400	214378
Canada	4054400	214378
France	4054400	214378
Germany	4054400	214378
NA	4054400	214378
United Kingdom	4054400	214378
USA	4054400	214378
Garrett Vargas		
Australia	4054400	214378
Canada	4054400	214378
France	4054400	214378
Germany	4054400	214378
NA	4054400	214378
United Kingdom	4054400	214378
USA	4054400	214378

STEP 9:

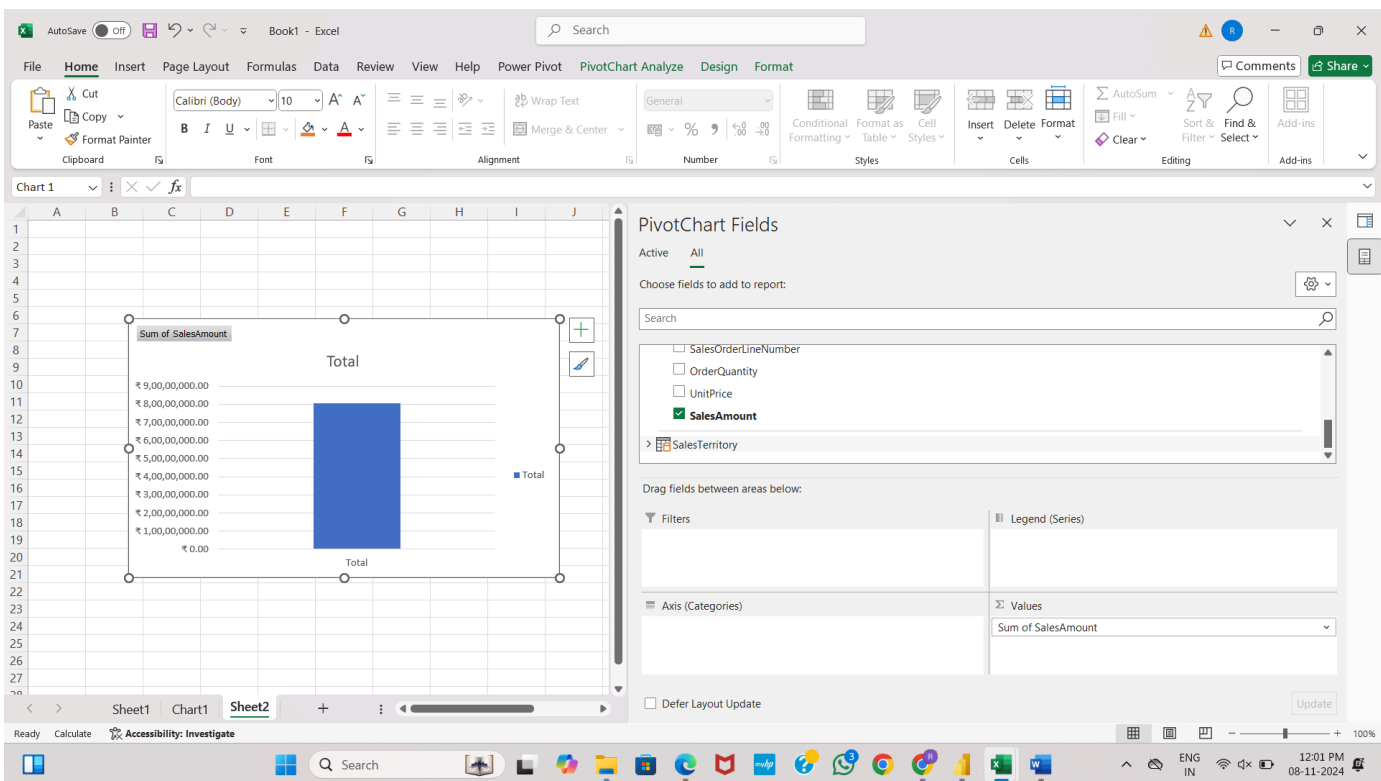
Open Sheet2 and on the Insert tab, and select the PivotChart drop-down. From the drop-down, choose the pivot chart. Insert the chart on the current sheet using the Use this workbook’s Data Model option.

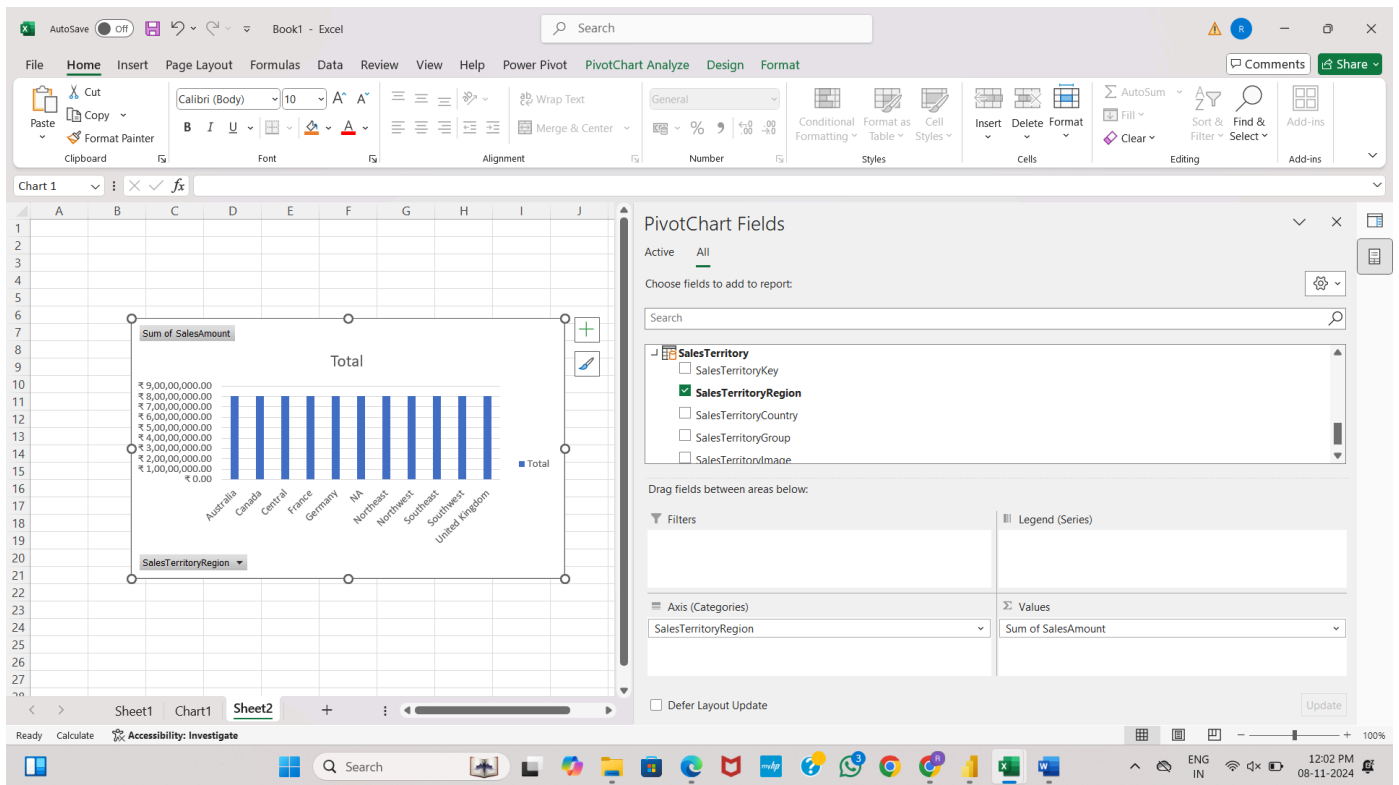




STEP 10:

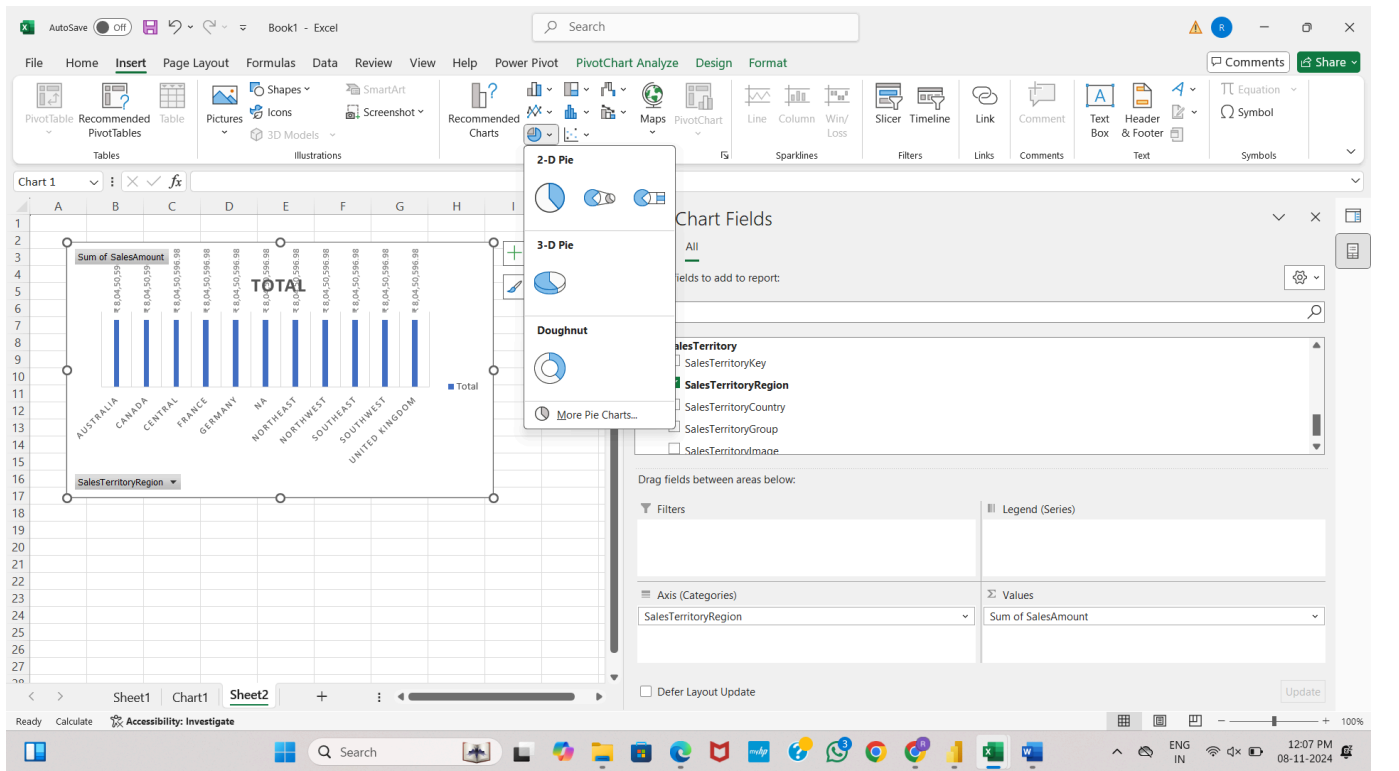
In the Field List window, add the Sales Amount from the Reseller Sales table to the Values drop area and add the Country Region Name from the Geography table to the Axis Fields drop area. The column chart showing sales by country.





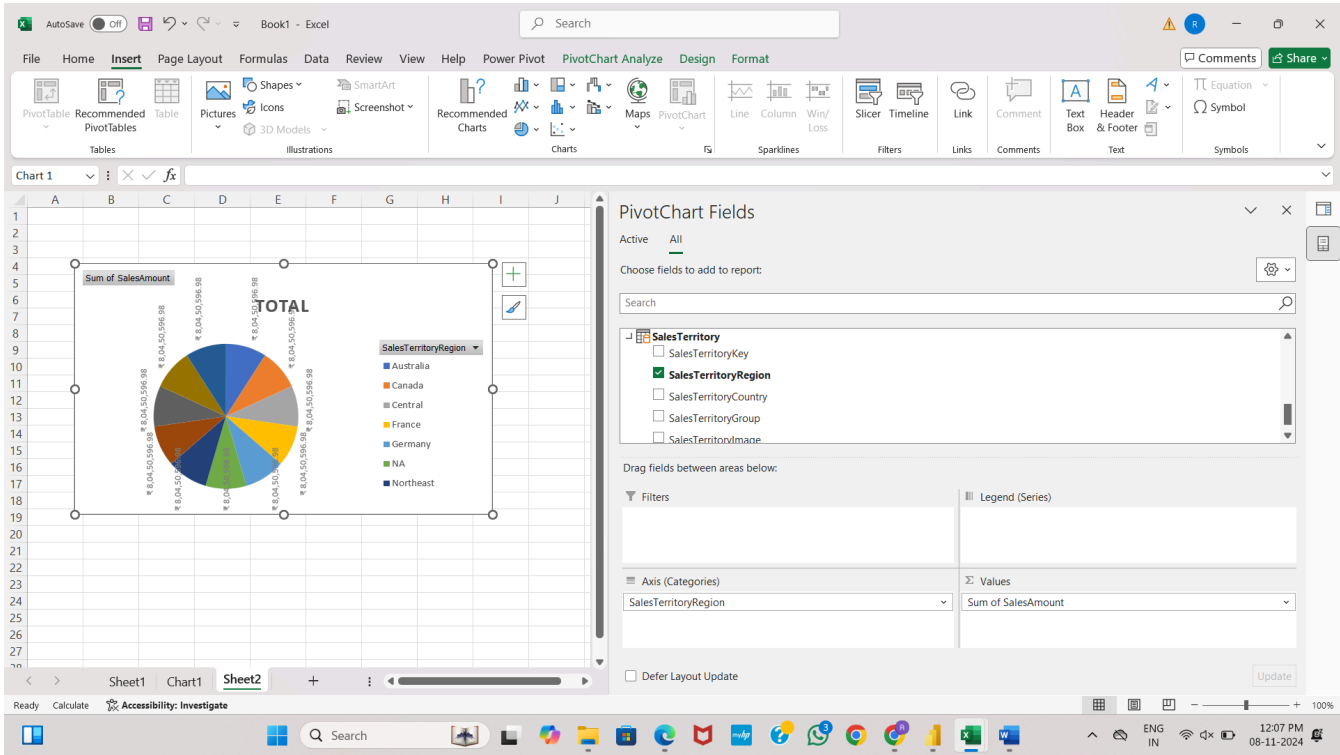
STEP 11:

Select the column chart. In the Design tab, we can change the chart colors, layout, and chart type.



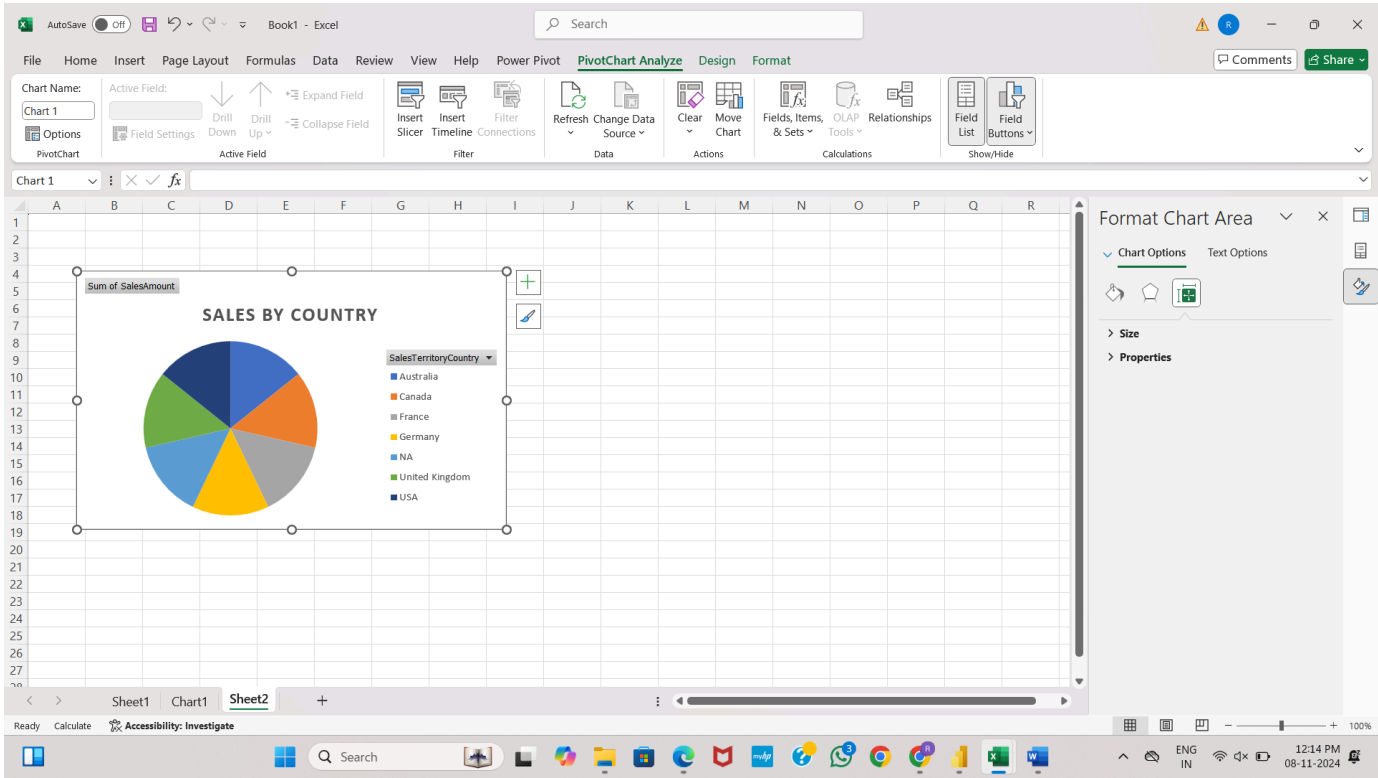
STEP 12:

The Format tab used to format the shapes and text in the chart. The Analyze tab used to show/hide the field buttons.



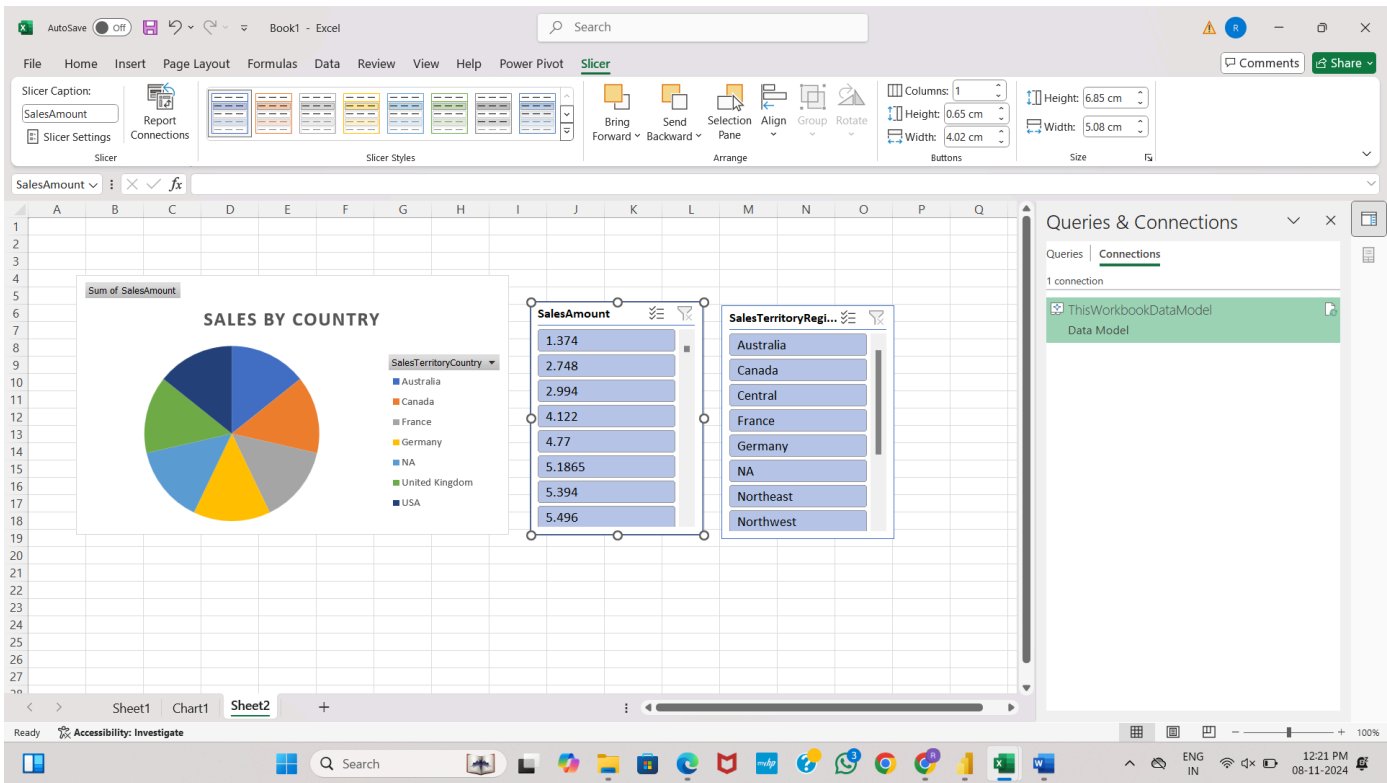
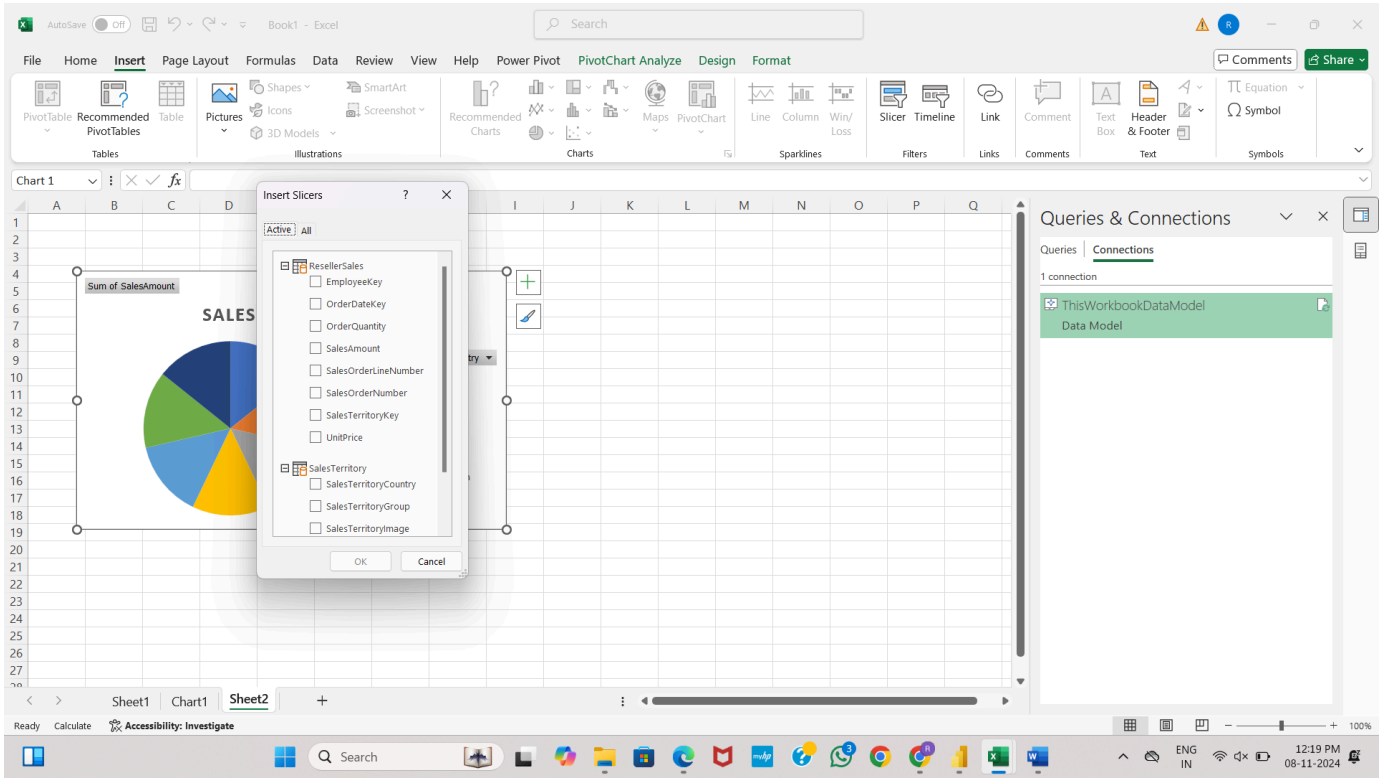
STEP 13:

Rename the title of the chart to Sales By Country. Hide the field buttons and delete the legend.



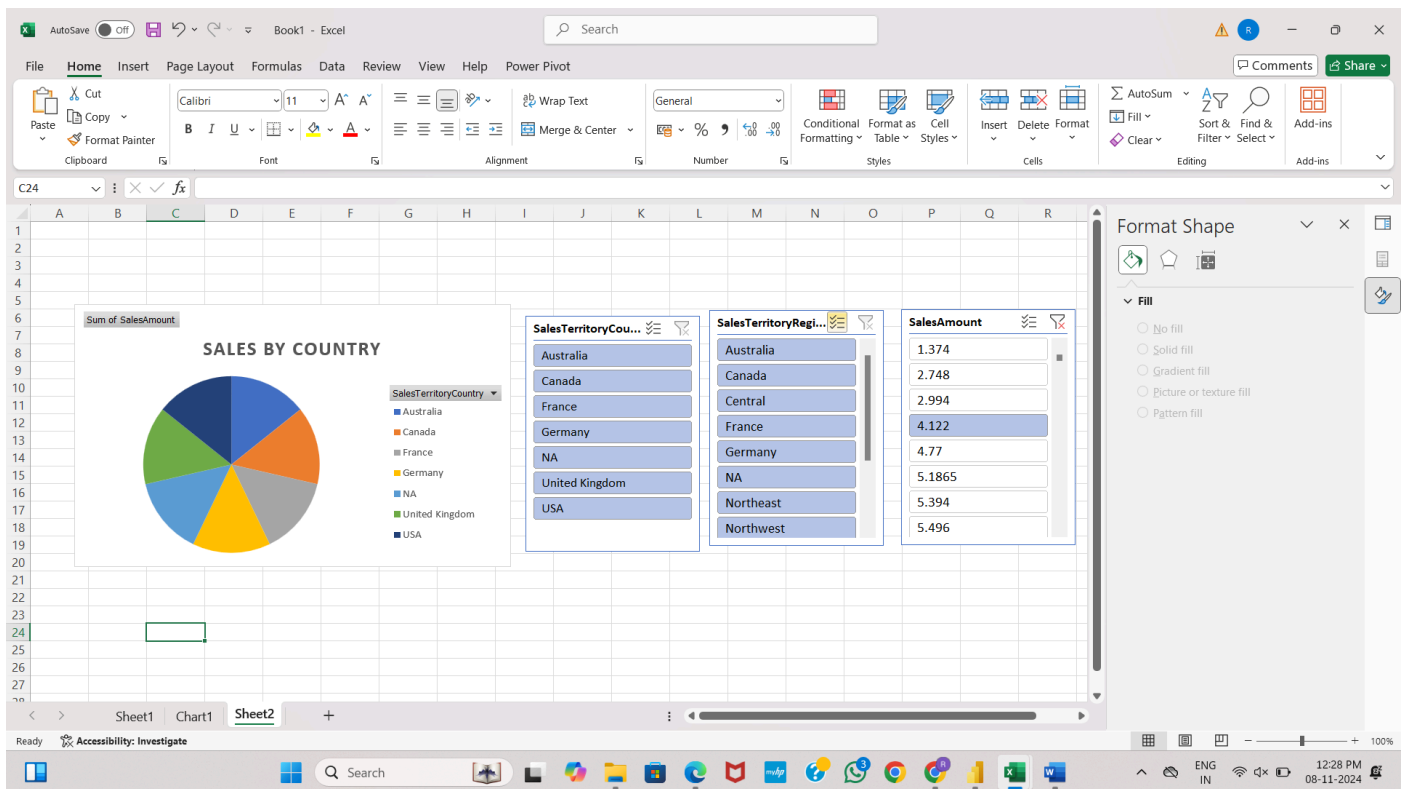
STEP 14:

With the pie chart selected, insert a slicer for the Sales by country and one for Sales by territory. Verify that the slicers filter the pie chart but not the pivot table.



STEP 15:

Verify that the slicers filter both the chart and the pivot table. The Pivot table and Charts are displayed successfully.



COE	20	
RECORD	20	
VIVA	10	
TOTAL	50	

RESULT:

Thus the power pivot tables and charta are created using Power Pivot inExcel.

