Lesson - 7 Homework

Question 1: Import Retail_Sales_Data.xlsx into Power BI.

OrderID	Date	Product	Region	Sales	Profit
2001	Sunday, January 1, 2023	Laptop	North	$1,200	$300
2002	Thursday, January 5, 2023	Mouse	South	$125	$25
2003	Tuesday, January 10, 2023	Keyboard	East	$80	$15

> ▦ Date ◉ ⋯
Σ OrderID
Product
Σ Profit
Region
Σ Sales
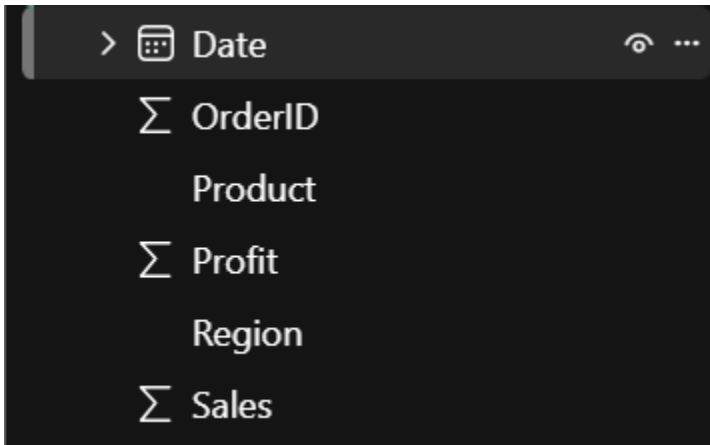
Question 2: Create a table visual showing Region and Sales.

Region	Sum of Sales
East	$80
North	$1,200
South	$125
Total	$1,405

Question 3 : Add a slicer for Product.

Product
- ☐ Keyboard
- ☐ Laptop
- ☐ Mouse
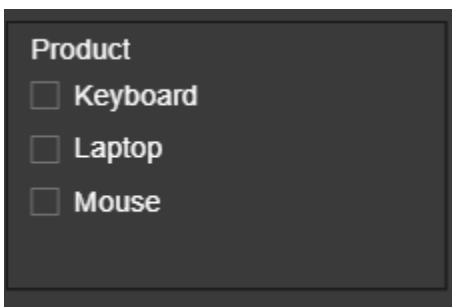
Question 4: Format the dashboard theme to "Dark Mode."
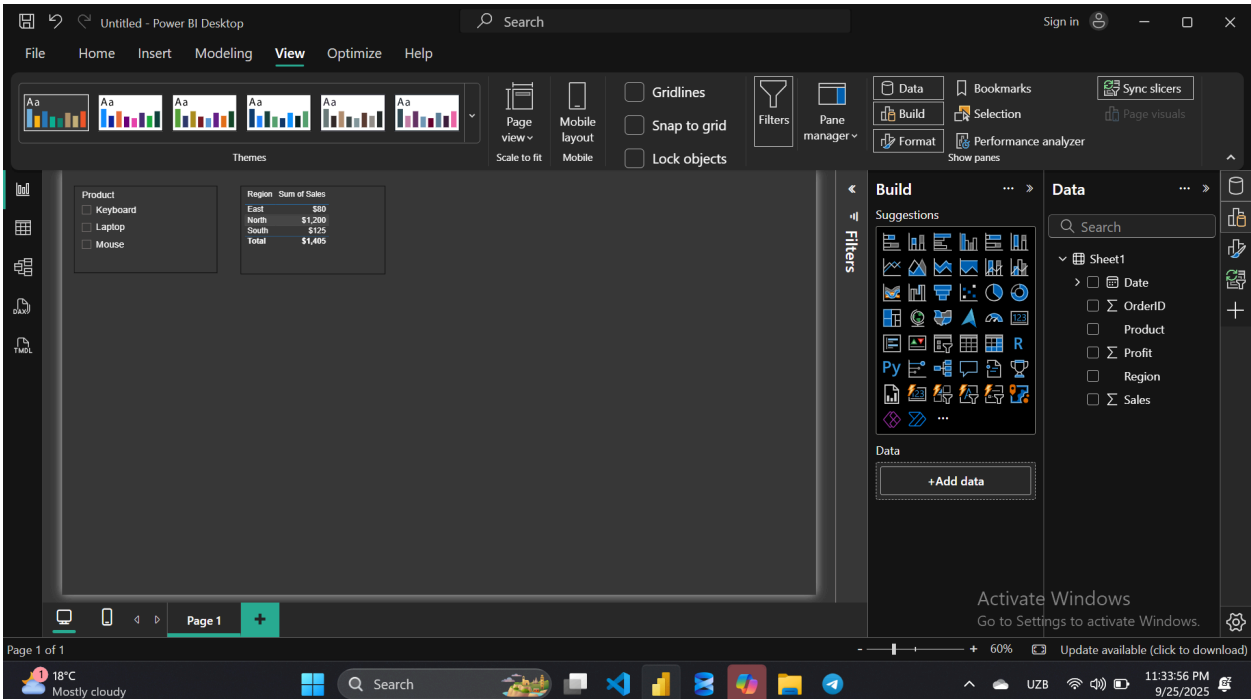
Question 5: What is the purpose of the "Data/Model" view in Power BI?

In a nutshell:

Data view is for inspecting the data inside your tables.

Model view is for managing the relationships between your tables.

They are two different views for two different jobs, both essential for building a correct and powerful data

Question 6: Build a dashboard with:
- A bar chart of Sales by Region.
- A line chart of Sales over Date.
- A card showing total Profit.
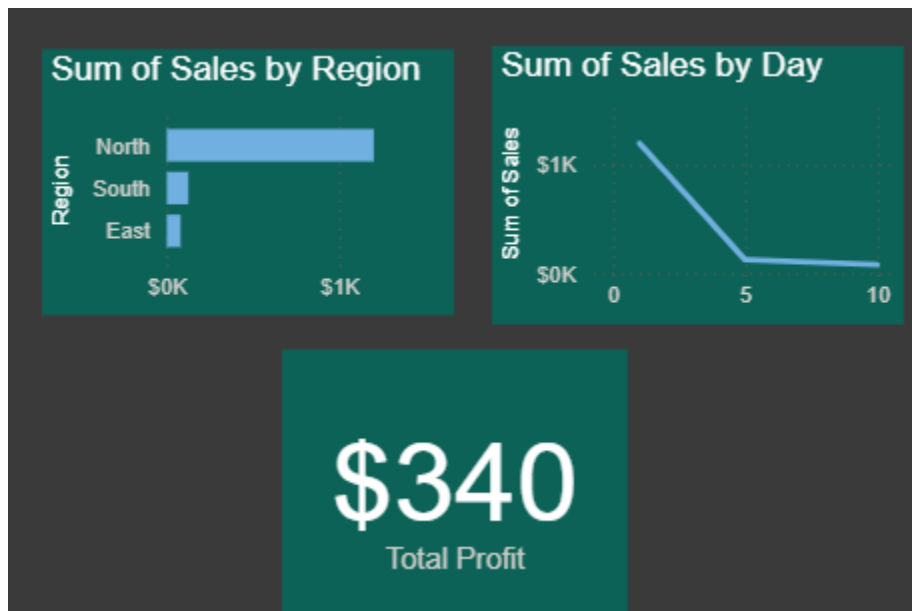
Question 7: Add a drill-through filter from Region to a detailed sales page.

Drill Through Page Setup: On a new page, create a table that shows detailed sales information using data from all three tables:
  o Product Name from the Products Table
  o SalesAmount and Quantity from the Sales Table
  o Customer Name from the Customers Table

Drag Region (from the Customers Table) into the Drill Through field in the Drill Through Pane.
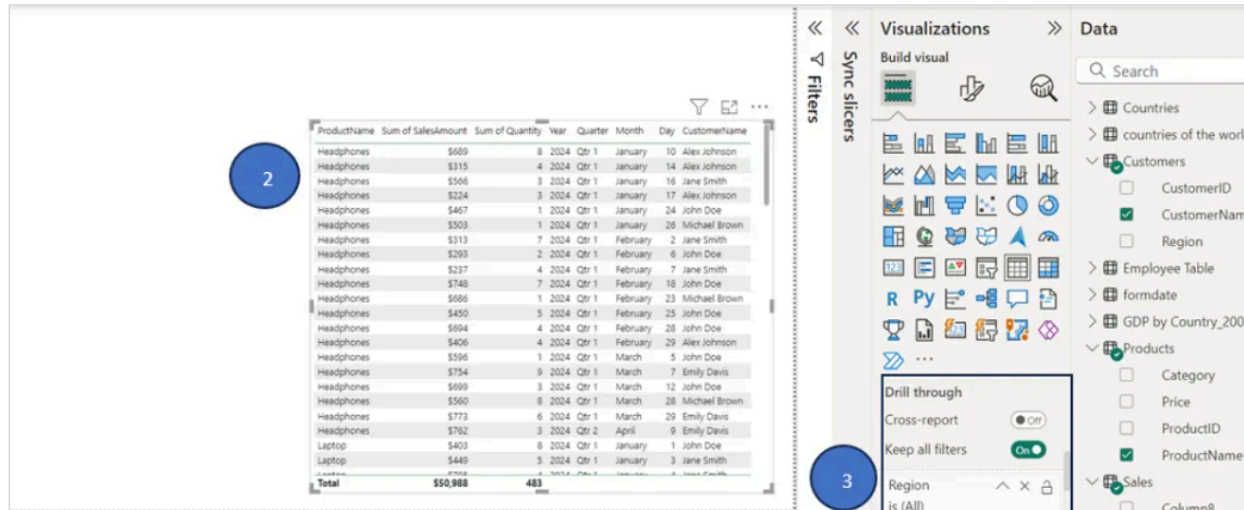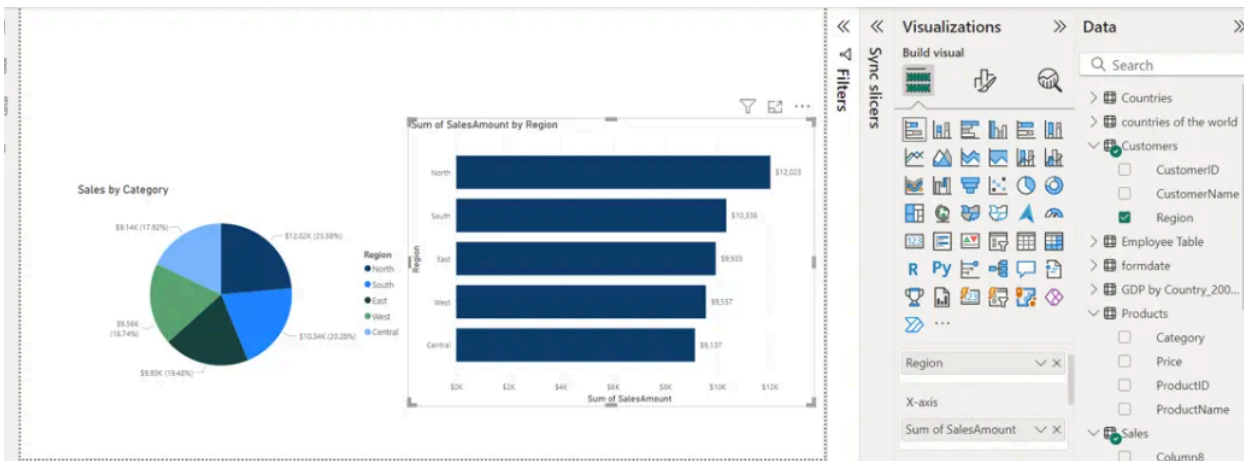
4. On the Main Page, right-click on a bar representing a region, such as "North." Select Drill Through to go to the Drill through page page.

5. The page will now show detailed sales data specifically for the North region, including all the products sold, sales amounts, and customers from that region.
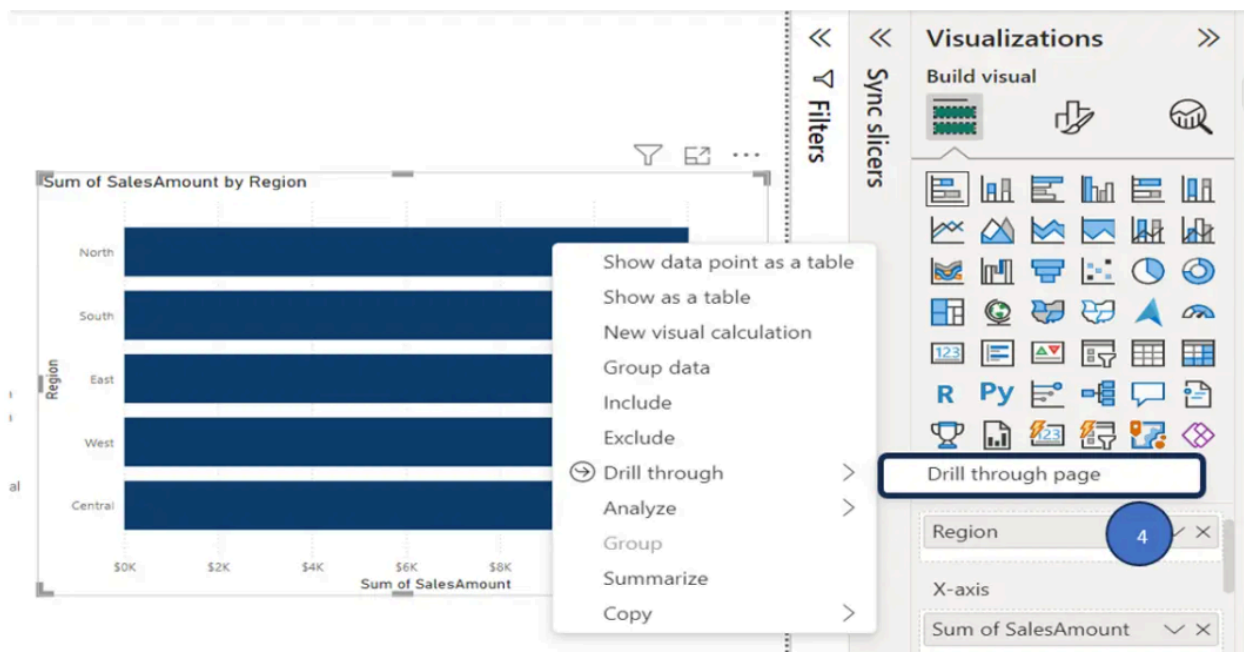
• The Drill through page will now show detailed sales data specifically for the North region, including all the products sold, sales amounts, and customers from that region.

ProductName	Sum of SalesAmount	Sum of Quantity	Year	Quarter	Month	Day	CustomerName
Headphones	$467	1	2024	Qtr 1	January	24	John Doe
Headphones	$293	2	2024	Qtr 1	February	6	John Doe
Headphones	$748	7	2024	Qtr 1	February	18	John Doe
Headphones	$450	5	2024	Qtr 1	February	25	John Doe
Headphones	$694	4	2024	Qtr 1	February	28	John Doe
Headphones	$596	1	2024	Qtr 1	March	5	John Doe
Headphones	$699	3	2024	Qtr 1	March	12	John Doe
Laptop	$403	8	2024	Qtr 1	January	1	John Doe
Laptop	$342	7	2024	Qtr 1	February	14	John Doe
Laptop	$419	4	2024	Qtr 1	February	16	John Doe
Monitor	$787	6	2024	Qtr 1	January	2	John Doe
Monitor	$512	1	2024	Qtr 1	January	30	John Doe
Monitor	$273	2	2024	Qtr 1	February	11	John Doe
Monitor	$347	5	2024	Qtr 1	March	4	John Doe
Monitor	$216	6	2024	Qtr 1	March	14	John Doe
Monitor	$357	2	2024	Qtr 1	March	15	John Doe
Monitor	$272	5	2024	Qtr 2	April	7	John Doe
Smartphone	$501	9	2024	Qtr 1	January	18	John Doe
Smartphone	$323	1	2024	Qtr 1	January	28	John Doe
Smartphone	$477	7	2024	Qtr 1	February	12	John Doe
Smartphone	$697	9	2024	Qtr 1	February	20	John Doe
Smartphone	$303	4	2024	Qtr 1	March	26	John Doe
Total	$12,023	115					

Question 8: Use conditional formatting to highlight high-profit regions.

Create a Table Visual with:

Rows: Region field

Values: Profit or Profit Margin % measure

Apply Conditional Formatting:

Select the table visual

In the Visualizations pane, under Fields, find your profit measure

Click the down arrow ▼ next to the profit field

Select Conditional formatting → Background color or Font color

Configure the Rules:

Format style: Choose "Rules"

What field should we base this on?: Select your profit measure

Rules setup:

Rule 1: If value is greater than [threshold] → Green

Rule 2: If value is less than [threshold] → Red/Orange

Region	Sum of Profit
North	$300
South	$25
East	$15
Total	$340

Question 9 : Publish the dashboard to Power BI Service.

Step 1: Save Your Report
In Power BI Desktop, click File > Save to ensure all your latest changes are saved.

Step 2: Publish to Power BI Service
In the top ribbon, click the "Publish" button.

Alternatively, go to Home tab > Publish.

Step 3: Select Destination Workspace
A window will appear showing your available workspaces in the Power BI Service.

Choose the destination workspace where you want to publish the report.

"My Workspace": Personal workspace (only you can access)

Other workspaces: Shared with colleagues (recommended for collaboration)

Step 4: Monitor Publishing Progress
You'll see a progress bar showing the upload status.

Once completed, you'll see a success message with options to:

Open in Power BI (opens in browser)

Get Quick Insights (AI-powered analysis)

Close

Question 10 : Share the report with a colleague (simulate steps).

Publish to a Workspace: Save and publish your report from Power BI Desktop to a Power BI Service (app.powerbi.com) workspace.

Grant Access: In the Power BI Service:

Go to the workspace containing your report.

Click Access in the top right corner.

Add your colleague's email address and assign them a role (e.g., Viewer).

Share Directly (Alternative): For a single report:

Open the report in the Power BI Service.

Click the Share button from the top menu.

Enter your colleague's email and configure permissions.

Question 11 : Add a custom "Sales Growth %" measure without DAX (use Quick Measures).

Open Quick Measures: In the Power BI Desktop Report view, right-click on your data table in the Fields pane and select New quick measure.

Select Calculation:

In the Quick Measures window, choose Year-over-year growth from the "Calculation" dropdown.

Configure Fields:

Base value: Drag and drop your Sales field (e.g., Sales Amount).

Date: Drag and drop your Date field (must be a dedicated date table).

Question 12 : Optimize the dataset for faster refresh (e.g., remove unused columns).

Date	Product	Region	Sales	Profit
Sunday, January 1, 2023	Laptop	North	$1,200	$300
Thursday, January 5, 2023	Mouse	South	$125	$25
Tuesday, January 10, 2023	Keyboard	East	$80	$15

Here above i removed unused columns

Question 13 :   Troubleshoot: Slicers not affecting all visuals—how to fix?

Check Data Model Relationships:

Go to Model view.

Ensure the table your slicer is based on has an active relationship (solid line) to the tables used in the unresponsive visuals. A dotted line indicates an inactive relationship.

2. Activate Inactive Relationships (if any):

If the relationship exists but is inactive, you can activate it in DAX for specific visuals using USERELATIONSHIP function, or set it as active.

3. Verify "Edit Interactions":

Select the slicer. Go to the Format tab.

Click Edit Interactions.

Ensure the filter icon above the unresponsive visual is set to "Filter" (highlighted) and not "None".

4. Check for Inconsistent Field Context:

Ensure the slicer field and the visual's fields are from related tables. A slicer on 'Product Category' won't filter a visual using 'Sales' from an unrelated table.

Question 14 :   **Embed the dashboard into a PowerPoint presentation.**

Get the Embed Code:

In the Power BI service (app.powerbi.com), open the report you want to embed.

Click File > Embed report > PowerPoint.

- **Choose a specific page or report state, then copy the provided embed code.**
- **Paste into PowerPoint:**
- **Open your PowerPoint presentation.**
- **Go to the slide where you want the dashboard.**
- **On the Insert tab, click My Add-ins > Get Add-ins.**
- **Search for and add the "Power BI" add-in by Microsoft.**
- **Embed the Content:**
- **In the Power BI add-in pane, paste the embed code you copied.**
- **Click Insert.**

Question 15 : **Set up a scheduled refresh for the dataset in Power BI Service.**

Configure Data Source Credentials:

In the Power BI service, go to your Workspace.

Select the Datasets + dataflows tab.

Click the ellipsis (…) next to your dataset and choose Settings.

Set Up the Gateway (if needed):

In the Settings page, expand the Data source credentials section.

If a gateway is required, configure it here and set the credentials to ensure Power BI can connect to your data source.

Configure the Schedule:
Expand the Scheduled refresh section.
Turn the slider On.
Set your preferred Frequency (Daily, Weekly) and Time Zone.
Add up to 8 specific refresh Times per day.

Save:
Click Apply at the bottom of the settings page.

Product		Region	Sum of Sales
☐ Keyboard		East	$80
☐ Laptop		North	$1,200
		South	$125
☐ Mouse		Total	$1,405

Sum of Sales by Region

Sum of Sales by Day

Region	Sum of Profit
North	$300
South	$25
East	$15
Total	$340

$340
Total Profit

Product	Year	Quarter	Month	Day	Sum of Sales	Sum of Profit
Keyboard	2023	Qtr 1	January	10	$80	$15
Laptop	2023	Qtr 1	January	1	$1,200	$300
Mouse	2023	Qtr 1	January	5	$125	$25
Total					$1,405	$340

Product	Year	Quarter	Month	Day	Sum of Sales	Sum of Profit
Keyboard	2023	Qtr 1	January	10	$80	$15
Laptop	2023	Qtr 1	January	1	$1,200	$300
Mouse	2023	Qtr 1	January	5	$125	$25
Total					$1,405	$340