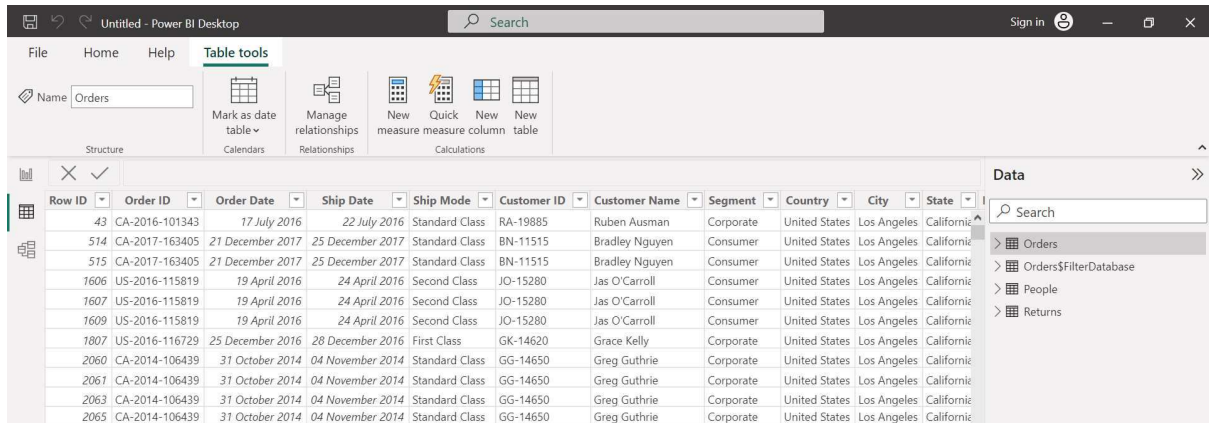


# Interactive Sales Dashboard using Power BI

## 1. Filtering

### Step 1: Load Excel Data

- Import your dataset into Power BI (choose **Get Data** > **Excel** > select your dataset).

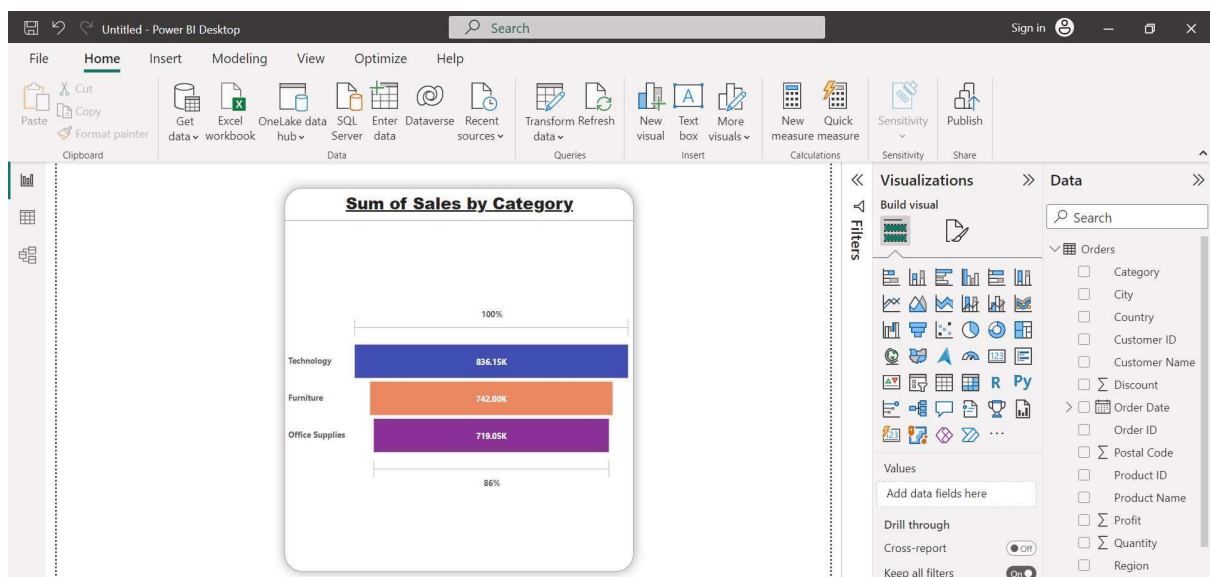


The screenshot shows the Power BI Desktop interface. The 'Table tools' ribbon is active, displaying options like 'Mark as date table', 'Manage relationships', 'New measure', 'Quick measure', 'New column', and 'New table'. Below the ribbon, a data table is visible with columns: Row ID, Order ID, Order Date, Ship Date, Ship Mode, Customer ID, Customer Name, Segment, Country, City, and State. The table contains 12 rows of data. On the right, the 'Data' pane shows a search bar and a list of tables: Orders, Orders\$FilterDatabase, People, and Returns.

| Row ID | Order ID       | Order Date       | Ship Date        | Ship Mode      | Customer ID | Customer Name  | Segment   | Country       | City        | State      |
|--------|----------------|------------------|------------------|----------------|-------------|----------------|-----------|---------------|-------------|------------|
| 43     | CA-2016-101343 | 17 July 2016     | 22 July 2016     | Standard Class | RA-19885    | Ruben Ausman   | Corporate | United States | Los Angeles | California |
| 514    | CA-2017-163405 | 21 December 2017 | 25 December 2017 | Standard Class | BN-11515    | Bradley Nguyen | Consumer  | United States | Los Angeles | California |
| 515    | CA-2017-163405 | 21 December 2017 | 25 December 2017 | Standard Class | BN-11515    | Bradley Nguyen | Consumer  | United States | Los Angeles | California |
| 1606   | US-2016-115819 | 19 April 2016    | 24 April 2016    | Second Class   | JO-15280    | Jas O'Carroll  | Consumer  | United States | Los Angeles | California |
| 1607   | US-2016-115819 | 19 April 2016    | 24 April 2016    | Second Class   | JO-15280    | Jas O'Carroll  | Consumer  | United States | Los Angeles | California |
| 1609   | US-2016-115819 | 19 April 2016    | 24 April 2016    | Second Class   | JO-15280    | Jas O'Carroll  | Consumer  | United States | Los Angeles | California |
| 1807   | US-2016-116729 | 25 December 2016 | 28 December 2016 | First Class    | GK-14620    | Grace Kelly    | Corporate | United States | Los Angeles | California |
| 2060   | CA-2014-106439 | 31 October 2014  | 04 November 2014 | Standard Class | GG-14650    | Greg Guthrie   | Corporate | United States | Los Angeles | California |
| 2061   | CA-2014-106439 | 31 October 2014  | 04 November 2014 | Standard Class | GG-14650    | Greg Guthrie   | Corporate | United States | Los Angeles | California |
| 2063   | CA-2014-106439 | 31 October 2014  | 04 November 2014 | Standard Class | GG-14650    | Greg Guthrie   | Corporate | United States | Los Angeles | California |
| 2065   | CA-2014-106439 | 31 October 2014  | 04 November 2014 | Standard Class | GG-14650    | Greg Guthrie   | Corporate | United States | Los Angeles | California |

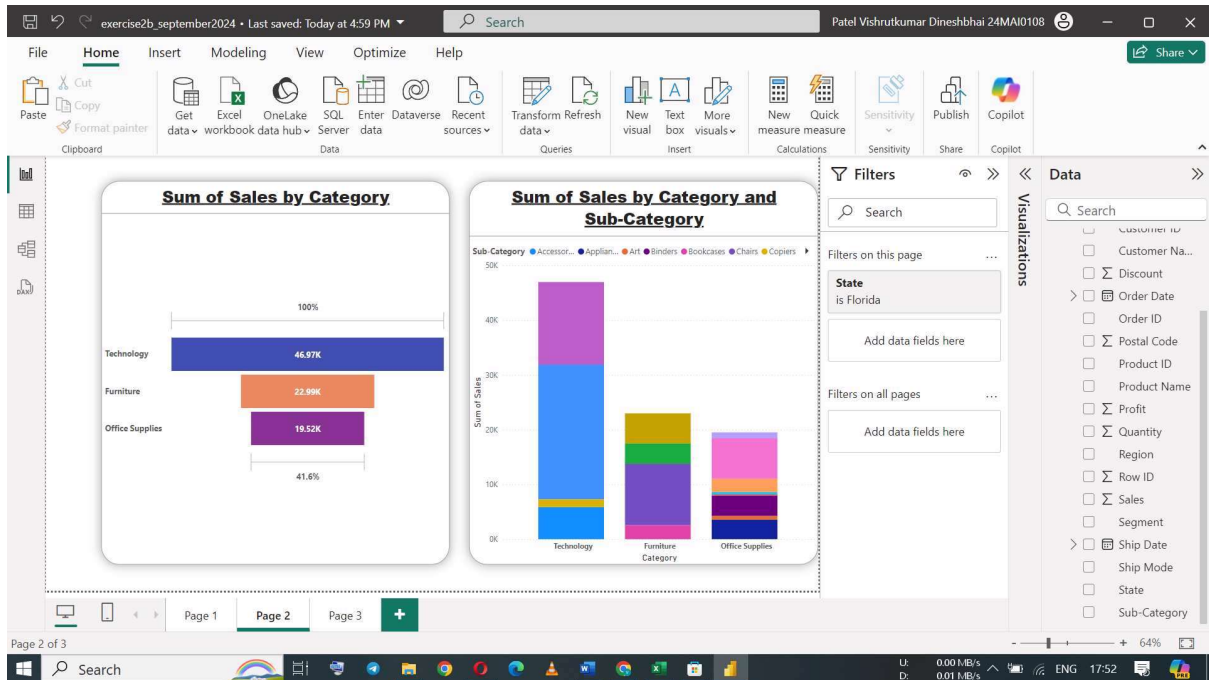
### Step 2: Create a Funnel Chart

- **Example:**
  - Select **Funnel Chart** from the visualization pane.
  - In the **Axis** field, drag **Category** (e.g., Furniture, Office Supplies, Technology).
  - In the **Values** field, drag **Sales** (this will show the sales distribution by product category).

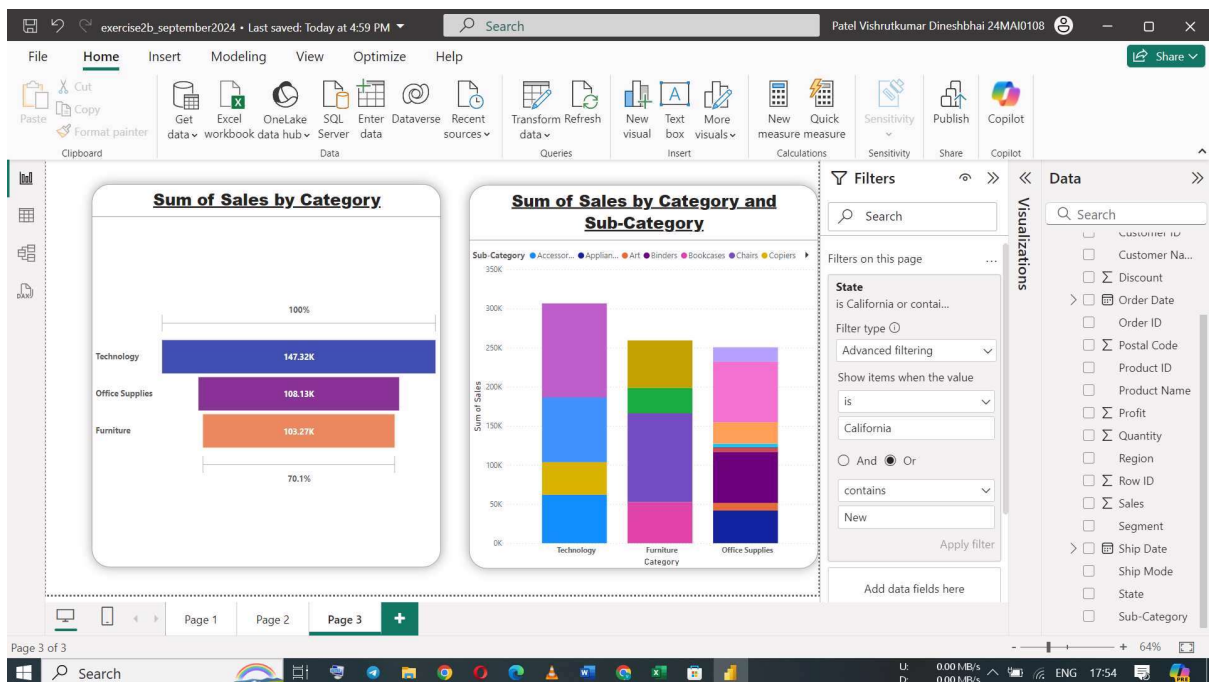


### Step 3: Add Filters

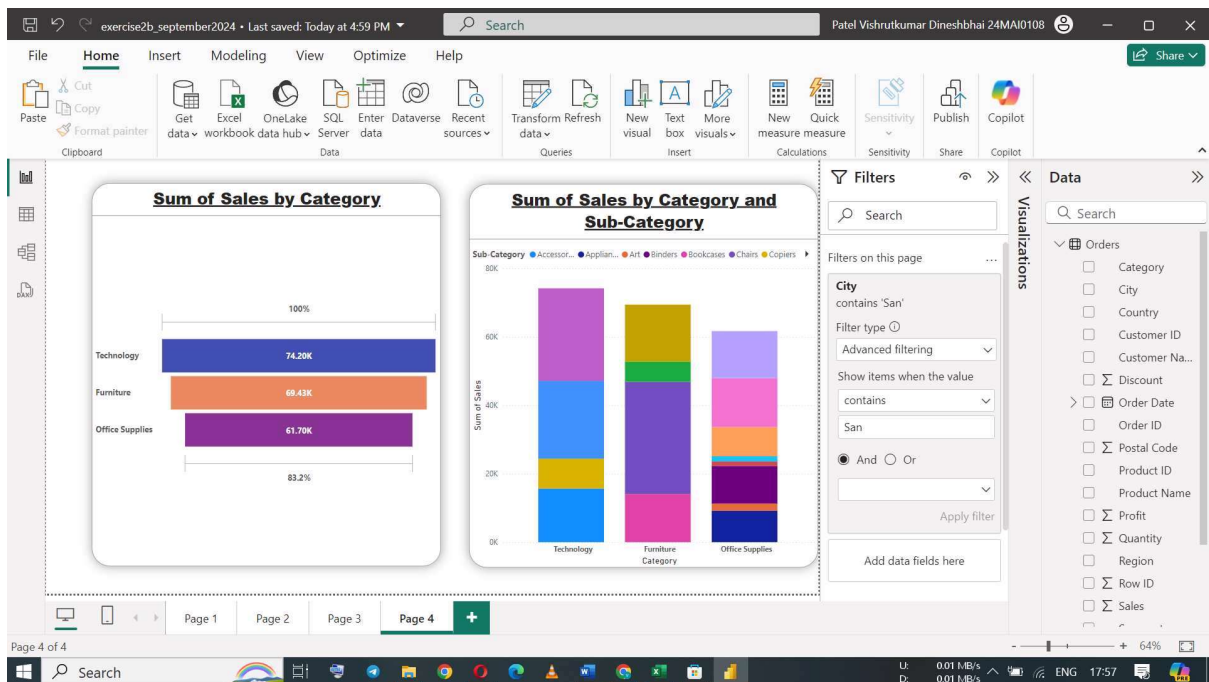
- **Basic Filtering Example:**
  - Drag **State** to the **Filters** pane.
  - Under **Basic Filtering**, choose specific states like **California** or **Florida** to filter the data and visualize sales for only these states.



- **Advanced Filtering Example:**
  - For **State**, set a filter condition like "State equals California" or "State contains New".



- Now, drag **City** to the **Filters** pane and use **Advanced Filtering** to set a condition like "City contains 'Los' " to filter cities like Los Angeles.



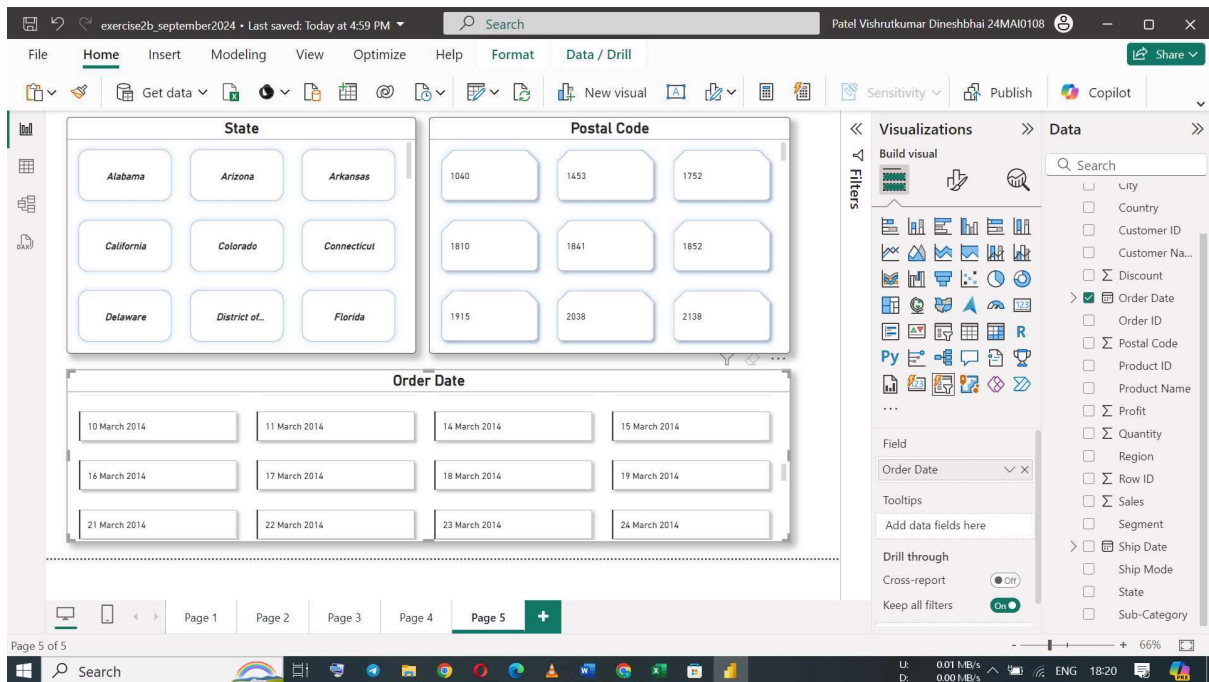
## Step 4: Display Graphs

- The filtered funnel chart will update based on your selected states and cities.

## 2. Slicing

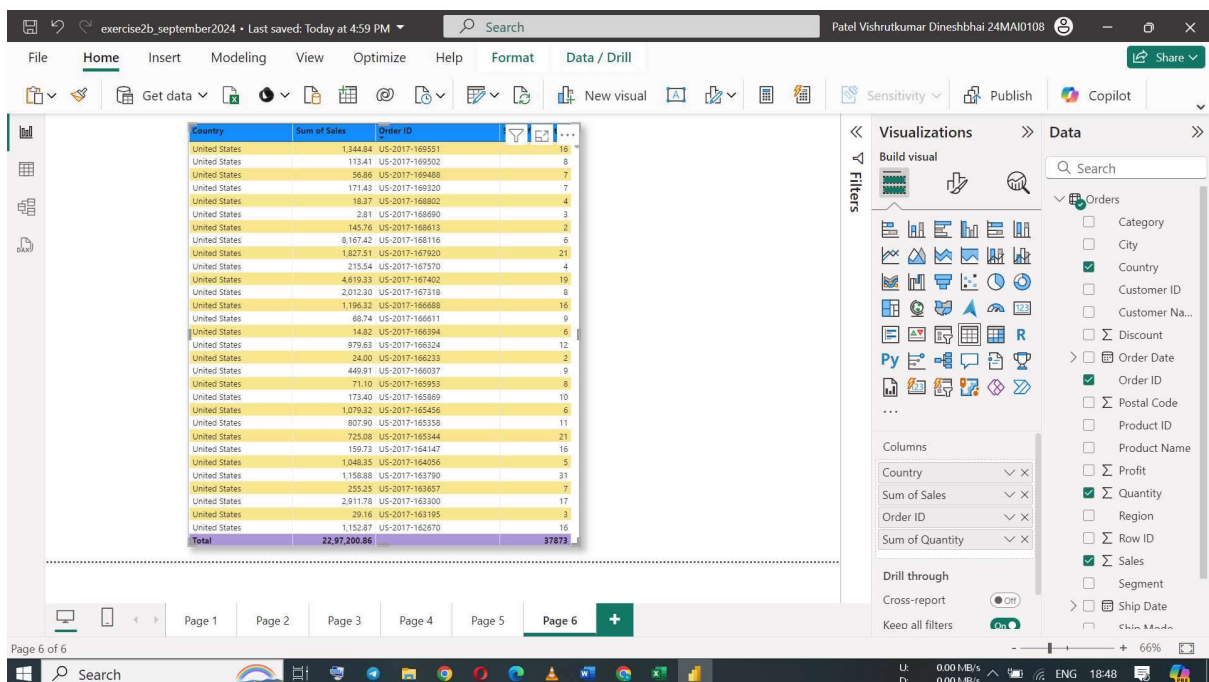
### Step 1: Create Slicers

- Go to a new page in Power BI.
- Add a Slicer for State:**
  - Select **Slicer** from the visualization pane.
  - Drag **State** to the **Field** section.
- Add a Slicer for Order Date:**
  - Add another slicer, and drag **Order Date** to the **Field** section. You can set the slicer to show a range or individual dates.
- Add a Slicer for Postal Code:**
  - Add a slicer for **Postal Code** similarly.



## Step 2: Create a Table

- Create a table visualization with the following columns:
  - **Category (Product Line)** (drag **Category** from the fields pane).
  - **Sales.**
  - **Order ID.**
  - **Quantity.**



### Step 3: Test Slicer Values

- Example: Choose **California** in the **State** slicer, select an **Order Date** range, and a specific **Postal Code**. Watch the table update based on these slicer selections.

The screenshot shows the Power BI Desktop interface with three slicers and a data table. The **State** slicer has buttons for Alabama, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, District of Columbia, and Florida. The **Order Date** slicer has buttons for dates from 03 January 2014 to 16 January 2014. The **Postal Code** slicer has buttons for 1040, 1453, 1752, 1810, 1841, 1852, 1915, 2038, and 2138. The data table shows sales data for the United States, with a total sum of sales of 22,97,200.86 and a total sum of quantity of 37879.

| Country       | Sum of Sales        | Order ID       | Sum of Quantity |
|---------------|---------------------|----------------|-----------------|
| United States | 23,661.23           | CA-2014-145317 | 25              |
| United States | 18,336.74           | CA-2016-118689 | 18              |
| United States | 14,052.48           | CA-2017-140151 | 9               |
| United States | 13,716.46           | CA-2017-127180 | 18              |
| United States | 10,539.90           | CA-2014-139892 | 37              |
| United States | 10,499.97           | CA-2017-166709 | 5               |
| United States | 9,900.19            | CA-2014-116904 | 17              |
| United States | 9,892.74            | CA-2016-117121 | 13              |
| United States | 9,135.19            | US-2016-107440 | 14              |
| United States | 8,805.04            | CA-2016-158841 | 20              |
| United States | 8,539.02            | CA-2016-143714 | 10              |
| United States | 8,319.29            | CA-2014-143917 | 17              |
| United States | 8,167.42            | US-2017-168116 | 6               |
| United States | 7,678.23            | US-2015-126977 | 40              |
| <b>Total</b>  | <b>22,97,200.86</b> |                | <b>37879</b>    |

### Step 4: Create Two Different Tables

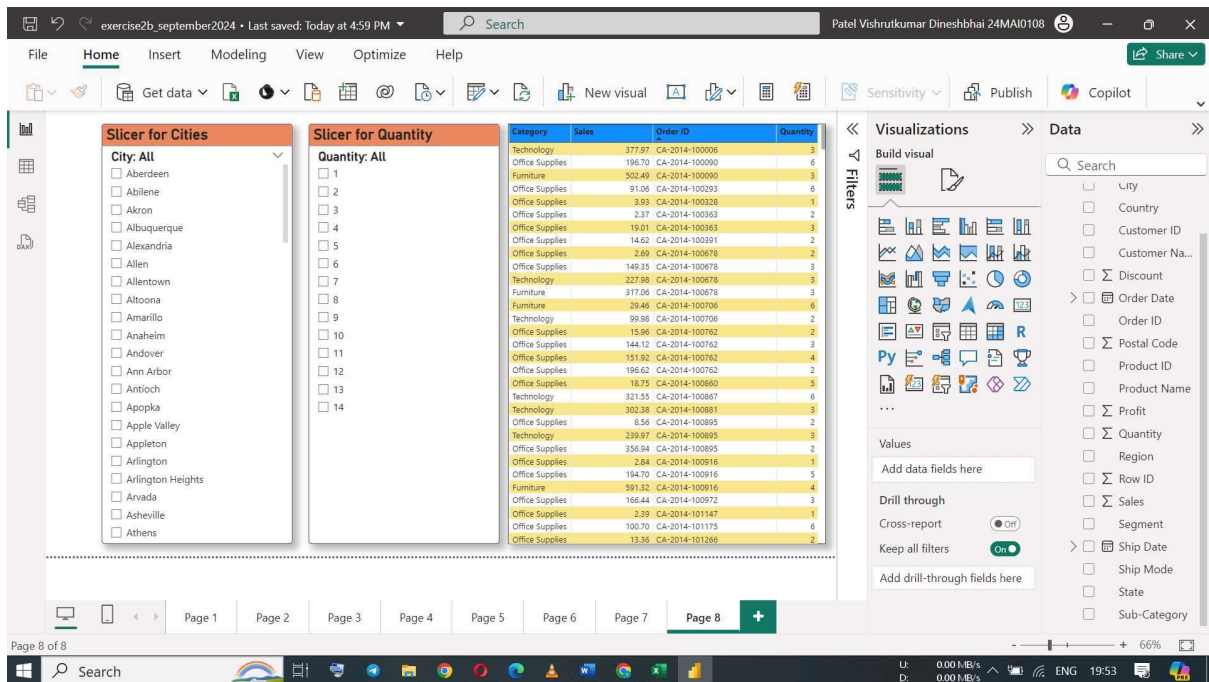
- Table 1: Using Slicers for State and Order Date**

The screenshot shows the Power BI Desktop interface with two slicers and a data table. The **Slicer for States** has a dropdown menu with a list of states, and **Colorado** is selected. The **Slicer for Order Date** has a dropdown menu with a list of dates, and **All** is selected. The data table shows sales data for the United States, with a total sum of sales of 22,97,200.86 and a total sum of quantity of 37879.

| Category        | Sales    | Order ID       | Quantity |
|-----------------|----------|----------------|----------|
| Office Supplies | 27.55    | CA-2014-111451 | 3        |
| Office Supplies | 78.60    | CA-2014-111451 | 5        |
| Furniture       | 218.35   | CA-2014-111451 | 3        |
| Furniture       | 230.35   | CA-2014-111451 | 3        |
| Furniture       | 300.42   | CA-2014-111451 | 3        |
| Office Supplies | 32.43    | CA-2014-120096 | 2        |
| Office Supplies | 177.54   | CA-2014-120096 | 4        |
| Furniture       | 4.22     | CA-2014-124737 | 3        |
| Office Supplies | 6.80     | CA-2014-124737 | 1        |
| Office Supplies | 15.55    | CA-2014-124737 | 3        |
| Office Supplies | 31.10    | CA-2014-124737 | 6        |
| Technology      | 143.64   | CA-2014-124737 | 9        |
| Office Supplies | 223.06   | CA-2014-124737 | 9        |
| Office Supplies | 2.00     | CA-2014-133690 | 1        |
| Furniture       | 218.75   | CA-2014-133690 | 2        |
| Office Supplies | 43.18    | CA-2014-134313 | 3        |
| Technology      | 1,983.97 | CA-2014-134313 | 4        |
| Technology      | 447.94   | CA-2014-140816 | 7        |
| Office Supplies | 14.38    | CA-2014-141355 | 2        |
| Technology      | 196.75   | CA-2014-142048 | 6        |
| Office Supplies | 3.39     | CA-2014-163419 | 1        |
| Technology      | 559.98   | CA-2014-163419 | 2        |
| Furniture       | 603.92   | CA-2014-163419 | 5        |
| Office Supplies | 35.81    | CA-2014-164210 | 4        |
| Furniture       | 145.98   | CA-2014-164210 | 2        |
| Office Supplies | 4.22     | CA-2015-104346 | 3        |
| Office Supplies | 13.12    | CA-2015-104346 | 5        |
| Office Supplies | 27.70    | CA-2015-104346 | 3        |
| Furniture       | 32.42    | CA-2015-104346 | 9        |
| Furniture       | 54.82    | CA-2015-104346 | 5        |
| Technology      | 58.08    | CA-2015-104346 | 4        |

- Table 2: Using Slicers for City and Quantity**





### 3. Drill Down Option

#### Step 1: Create a Bar Graph

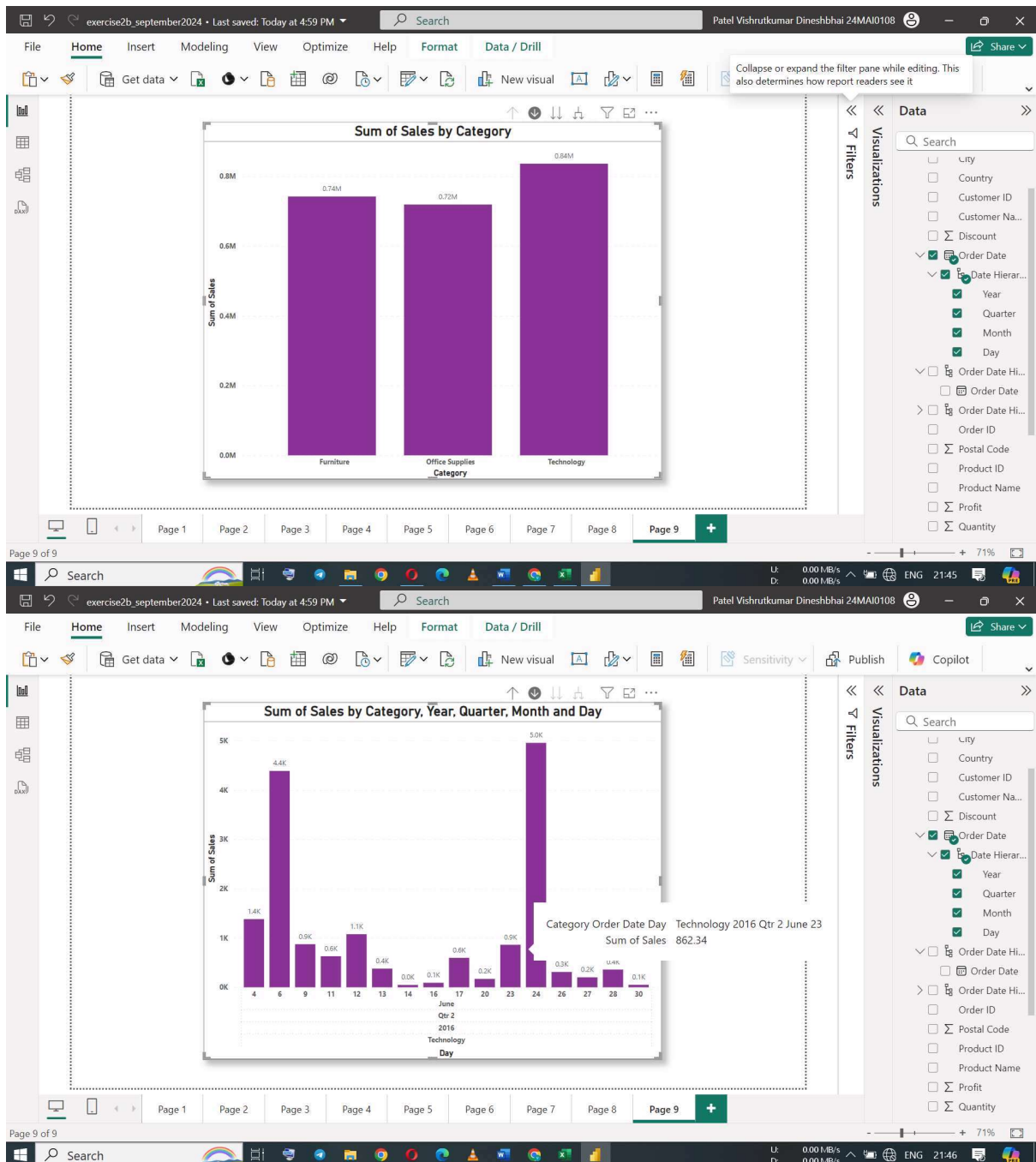
- **Example:**
  - Choose a **Stacked Bar Chart** from the visualization pane.
  - Drag **Category** to the **Axis**.
  - Drag **Sales** to the **Values**.

#### Step 2: Add Date Hierarchy

- Drag **Order Date** and create a hierarchy with **Year, Quarter, Month, and Date**:
  - Right-click on **Order Date** > **New Hierarchy**.
  - Add **Year, Quarter, Month, and Date** to this hierarchy.

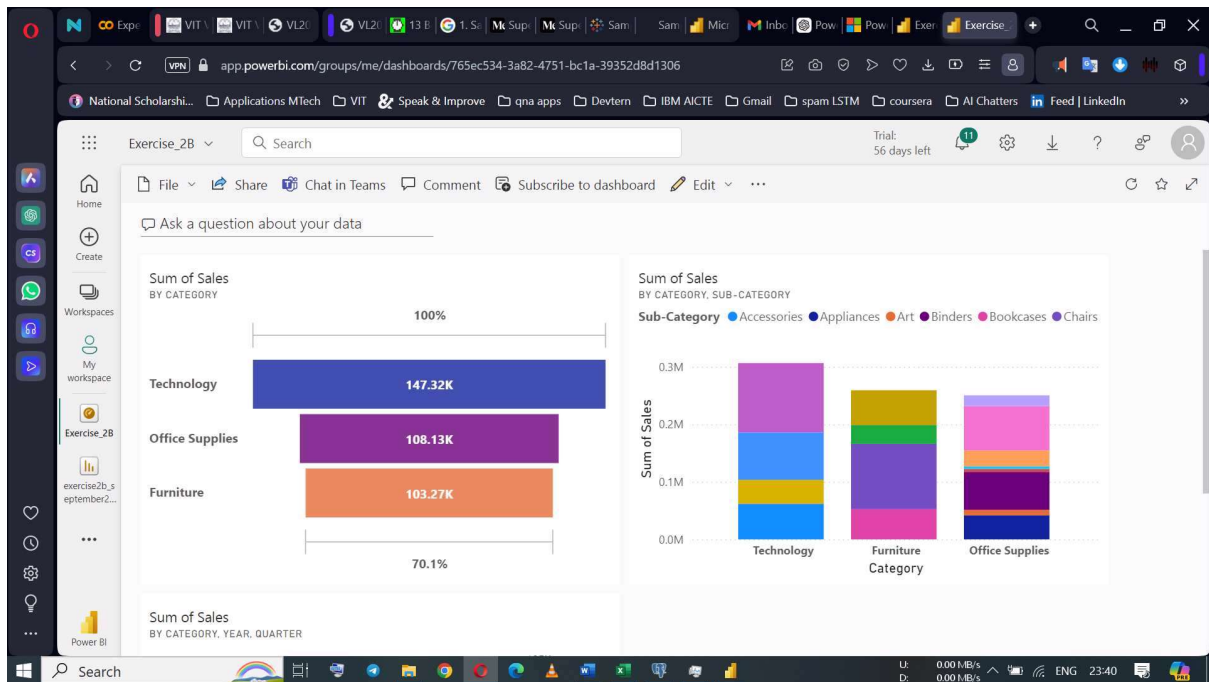
#### Step 3: Enable Drill Down

- Enable the **Drill Down** option by selecting the downward arrow on the top of the bar graph.
- **Example:**
  - Drill down from **Year** to **Quarter, Month, and Date** to explore the sales distribution across time for different product categories.



#### 4. Create a Dashboard

- Combine the following elements into a single dashboard:
  - Funnel Chart** (filtered by state and city).
  - Table 1 and Table 2** (with slicers applied).
  - Drill-down Bar Graph** showing sales over time by category.



Dashboard Link : [https://app.powerbi.com/groups/me/dashboards/765ec534-3a82-4751-bc1a-39352d8d1306?ctid=d4963ce2-af94-4122-95a9-644e8b01624d&pbi\\_source=linkShare](https://app.powerbi.com/groups/me/dashboards/765ec534-3a82-4751-bc1a-39352d8d1306?ctid=d4963ce2-af94-4122-95a9-644e8b01624d&pbi_source=linkShare)