

DATA VISUALIZATION EXPERIMENTS

6 (A) Create a first visualization with tableau software for data file formats

Website to download: [sandbox:/mnt/data/tableau_lab_dataset.xlsx](#)

The workbook contains these sheets (brief):

Sales_TimeSeries — date / region / product / sales / quantity / profit (time series, line & bar charts, dual-axis).

Category_Summary — category / subcategory / sales / profit (treemaps).

Calculations_Data — numeric rows to practice calculated fields (sum, avg, custom).

PivotData — employee / project / hours / date (pivoting practice).

Filters_Data — customer demographics and sales (filtering, sorting).

DualAxis_Cyclical — monthly cyclical metrics (dual axis, seasonal & cyclical analysis).

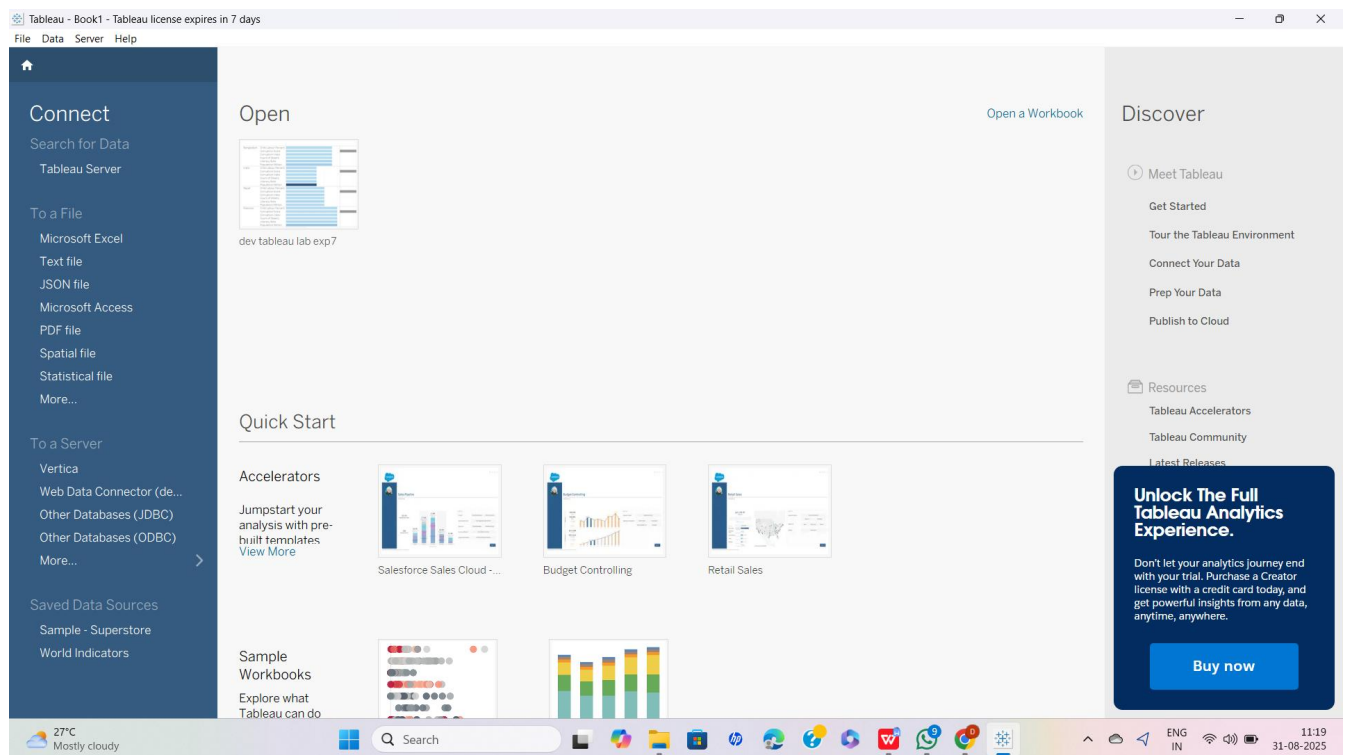
CircularArea_Data — segments & values (pie / circular area charts).

6 a) Create a first visualization with Tableau software for data file formats (open an Excel and make a simple line)

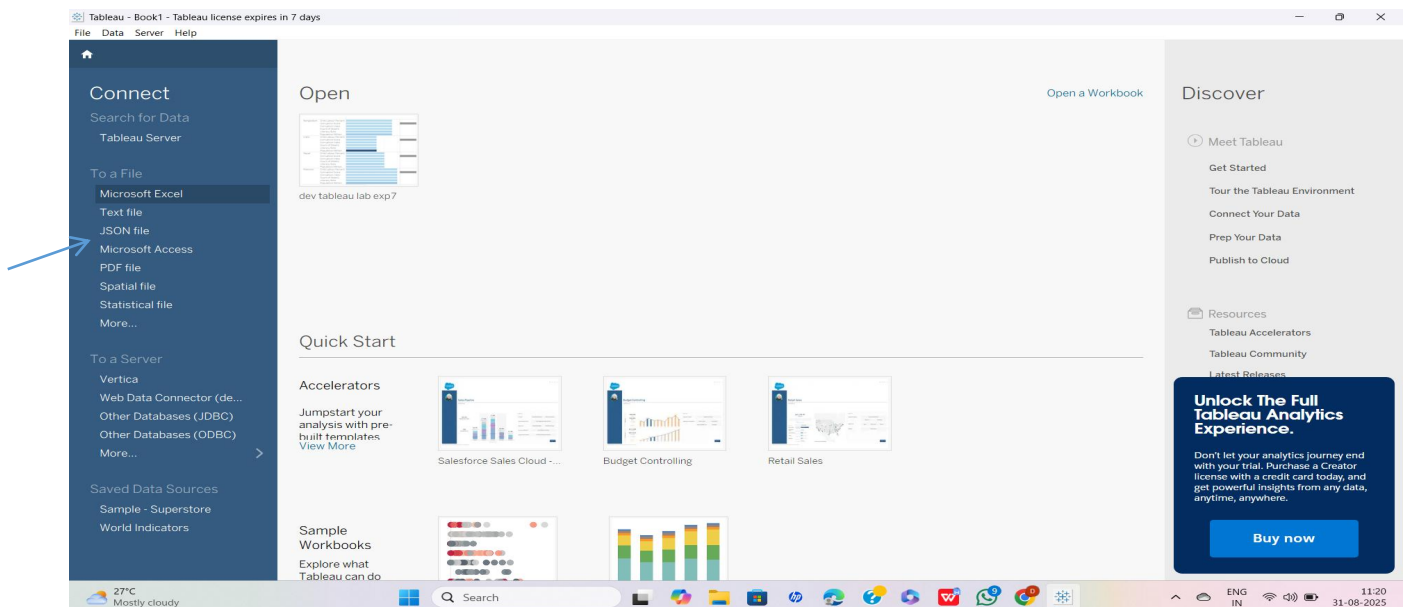
STEPS:

1. Open **Tableau Desktop** or **Tableau Public**.
2. On the Start page click **Microsoft Excel** under **Connect**.
3. In the file chooser navigate to and select **tableau_lab_dataset.xlsx** and click **Open**.
4. In the left pane click the sheet **Sales_TimeSeries** to load it (drag it to the canvas if prompted).
5. Switch to the **Sheet 1** tab at the bottom.
6. In the Data pane locate the field **Order Date** (Data type: Date). Drag **Order Date** to the **Columns** shelf.
7. In the Data pane locate **Sales** (Measure). Drag **Sales** to the **Rows** shelf.
8. On the **Marks** card set the mark type to **Line** (click the dropdown that may show Automatic and choose **Line**).
9. If Tableau aggregated by MONTH, and you want continuous dates, click the **Order Date** pill on Columns and choose **Month** → **Continuous** (DATEPART vs DATETRUNC options).
10. Confirm you see a line showing **SUM(Sales)** over time — that's your first visualization.

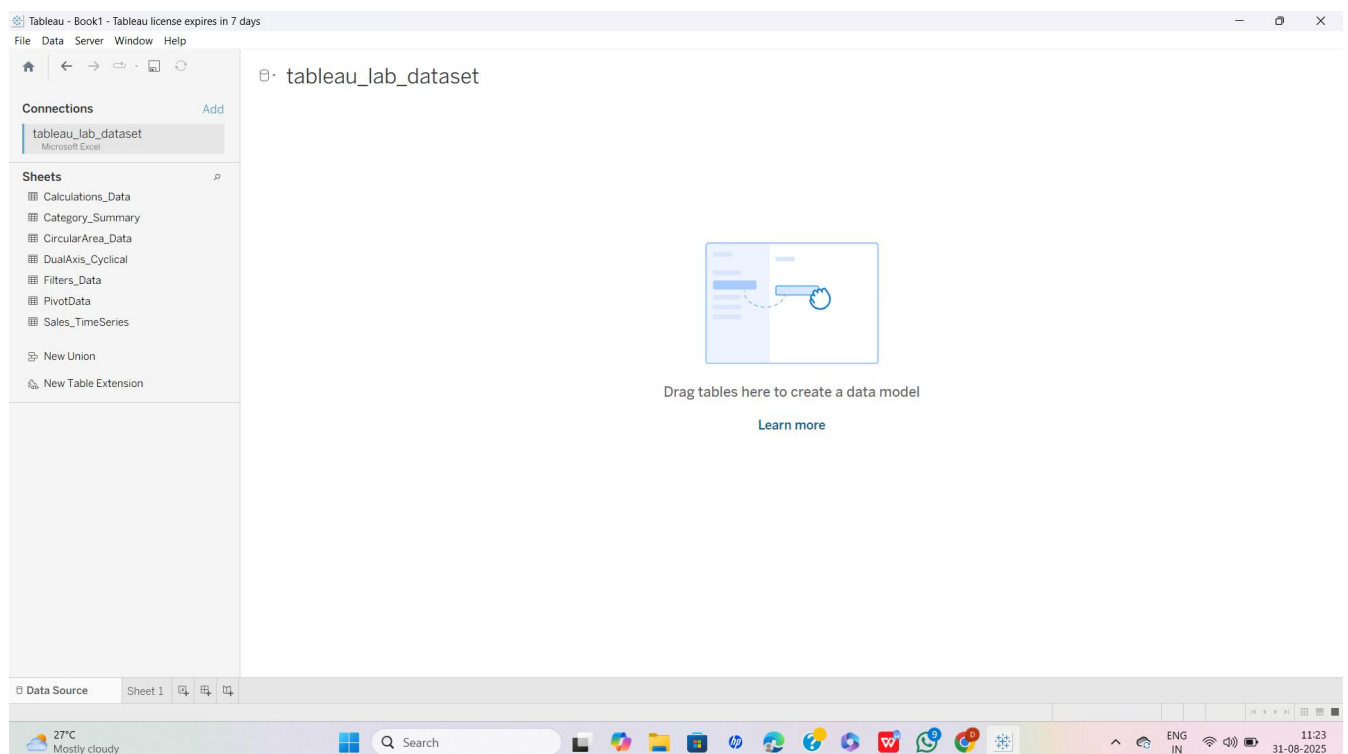
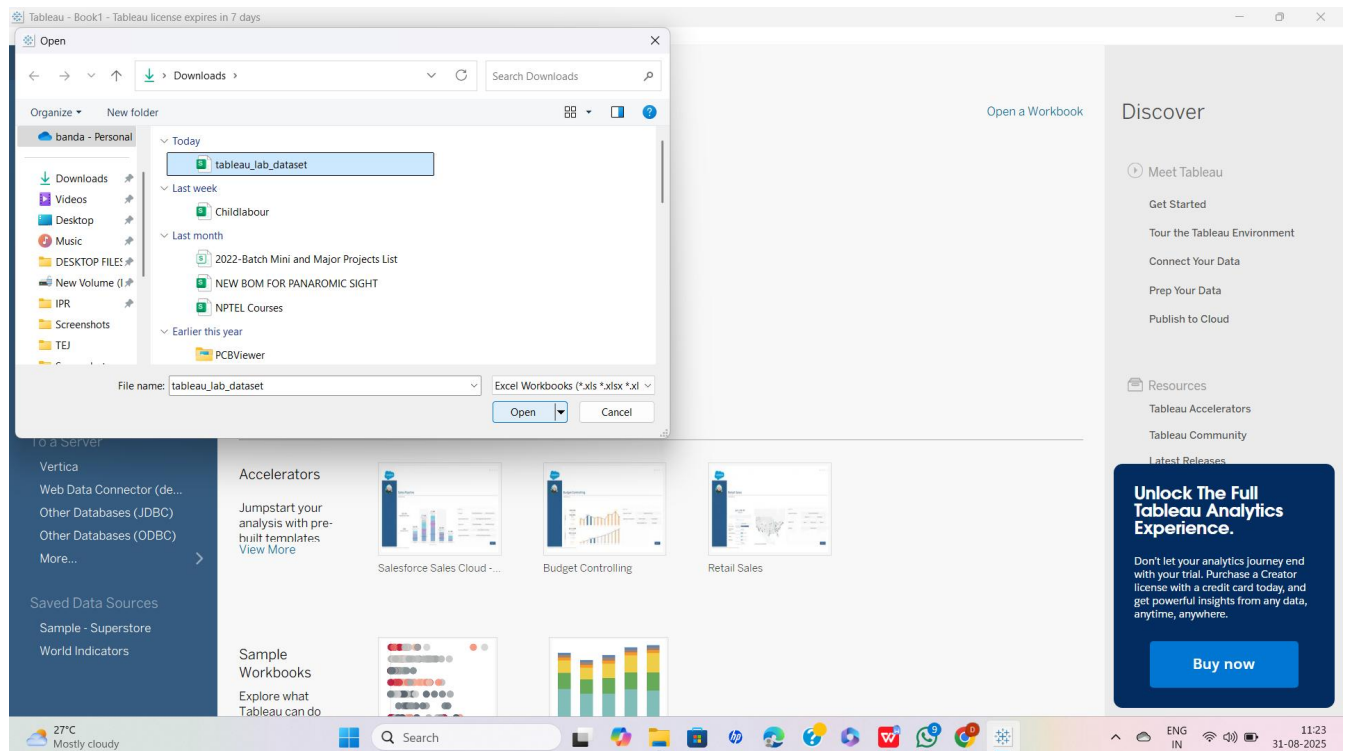
STEP 1 SCREENSHOT (Open Tableau Desktop or Tableau Public)



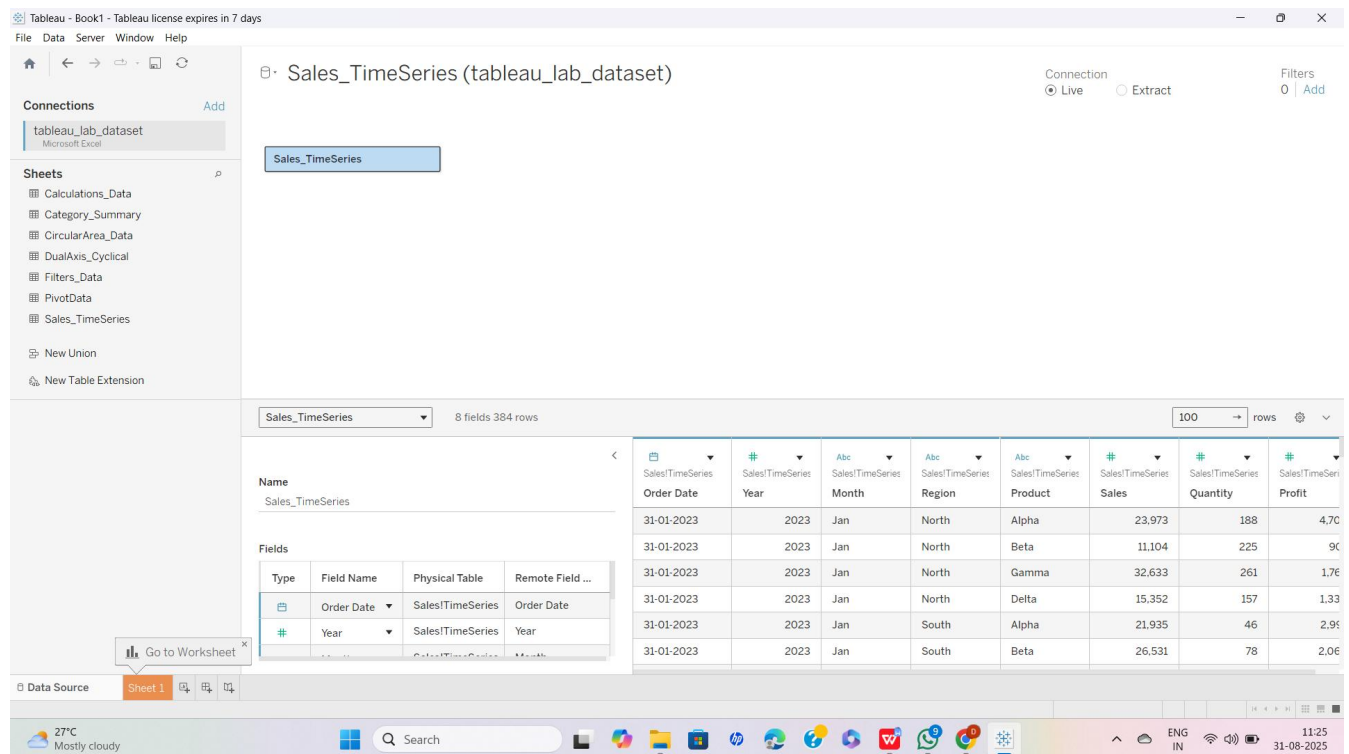
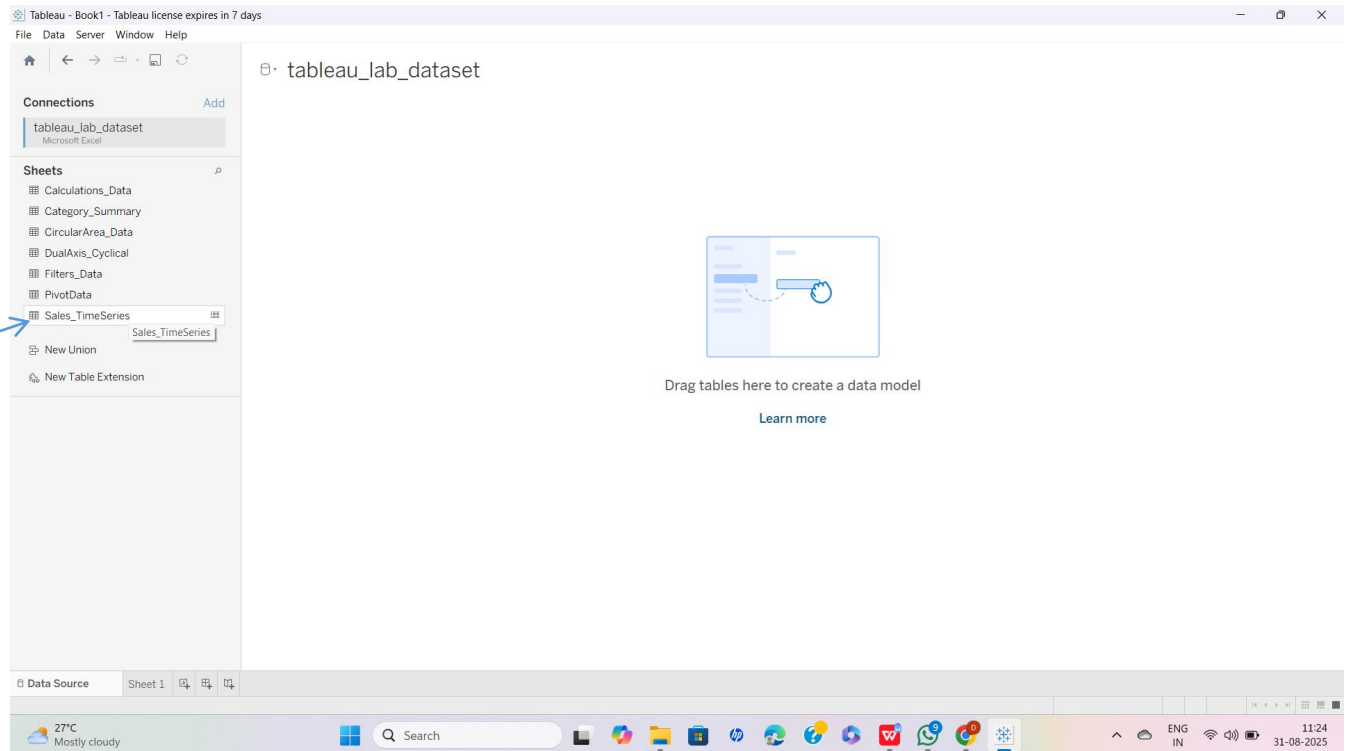
STEP 2 SCREENSHOT (On the Start page click Microsoft Excel under Connect)



STEP 3 SCREENSHOT (In the file chooser navigate to and select tableau_lab_dataset.xlsx and click OPEN)



STEP 4 SCREENSHOT (In the left pane click the sheet **Sales_TimeSeries** to load it (drag it to the canvas if prompted)).



STEP 5 SCREENSHOT (SWITCH TO SHEET 1 Tab at the bottom)

Tableau - Book1 - Tableau license expires in 7 days

File Data Server Window Help

Connections

- tableau_lab_dataset (Microsoft Excel)

Sheets

- Calculations_Data
- Category_Summary
- CircularArea_Data
- DualAxis_Cyclical
- Filters_Data
- PivotData
- Sales_TimeSeries
- New Union
- New Table Extension

Sales_TimeSeries (tableau_lab_dataset)

Connection: ☒ Live ☐ Extract

Filters: 0 | Add

Sales_TimeSeries

8 fields 384 rows

100 rows

Name: Sales_TimeSeries

Fields

Type	Field Name	Physical Table	Remote Field ...
Order Date	Order Date	SalesTimeSeries	Order Date
Year	Year	SalesTimeSeries	Year

SalesTimeSeries	SalesTimeSeries	SalesTimeSeries	SalesTimeSeries	SalesTimeSeries	SalesTimeSeries	SalesTimeSeries	SalesTimeSeries	SalesTimeSeries
Order Date	Year	Month	Region	Product	Sales	Quantity	Profit	
31-01-2023	2023	Jan	North	Alpha	23.973	188	4.70	
31-01-2023	2023	Jan	North	Beta	11.104	225	90	
31-01-2023	2023	Jan	North	Gamma	32.633	261	1.76	
31-01-2023	2023	Jan	North	Delta	15.352	157	1.33	
31-01-2023	2023	Jan	South	Alpha	21.935	46	2.96	
31-01-2023	2023	Jan	South	Beta	26.531	78	2.06	

Go to Worksheet

Data Source: Sheet 1

Tableau - Book1 - Tableau license expires in 7 days

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Standard

Show Me

Data

Search

Tables

- Month
- Order Date
- Product
- Region
- Year
- Measure Names
- Profit
- Quantity
- Sales
- Sales_TimeSeries (Count)
- Measure Values

Filters

Marks

Automatic

Color Size Text

Detail Tooltip

Columns

Rows

Sheet 1

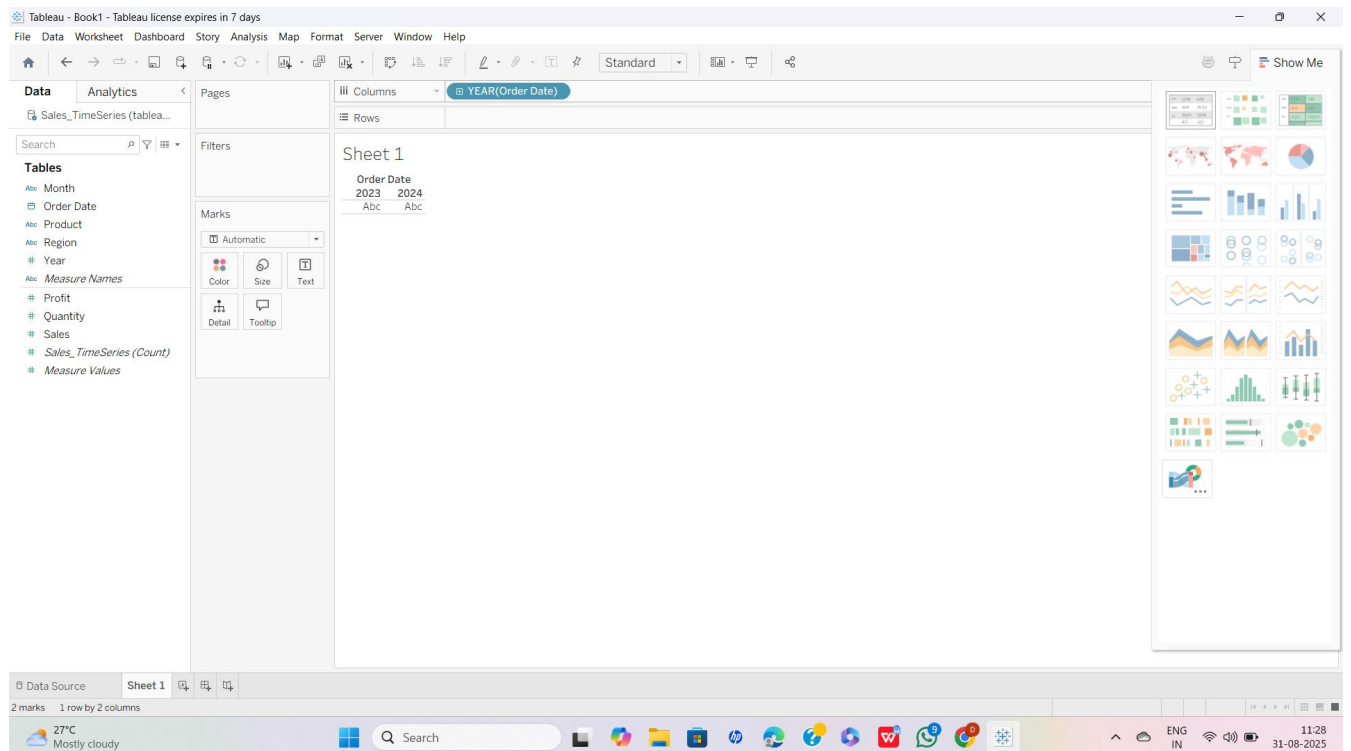
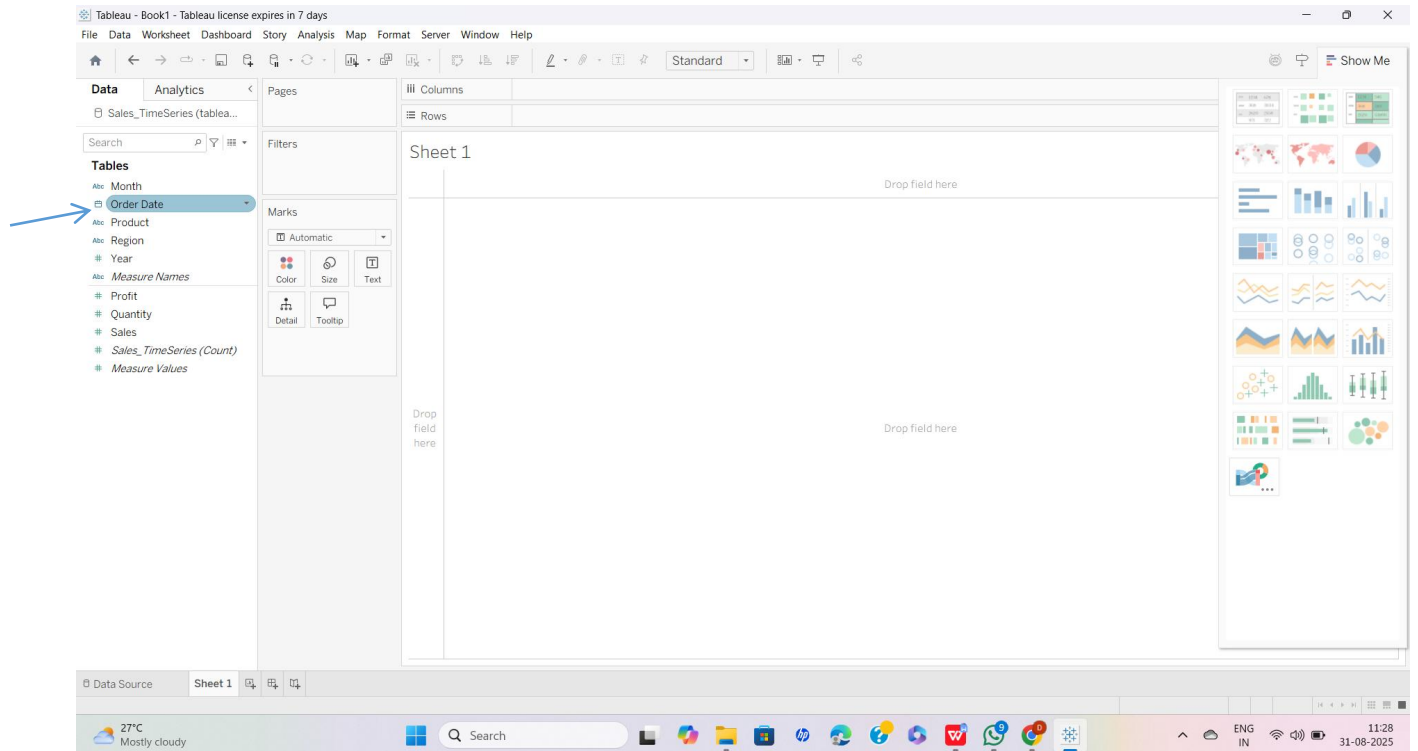
Drop field here

Drop field here

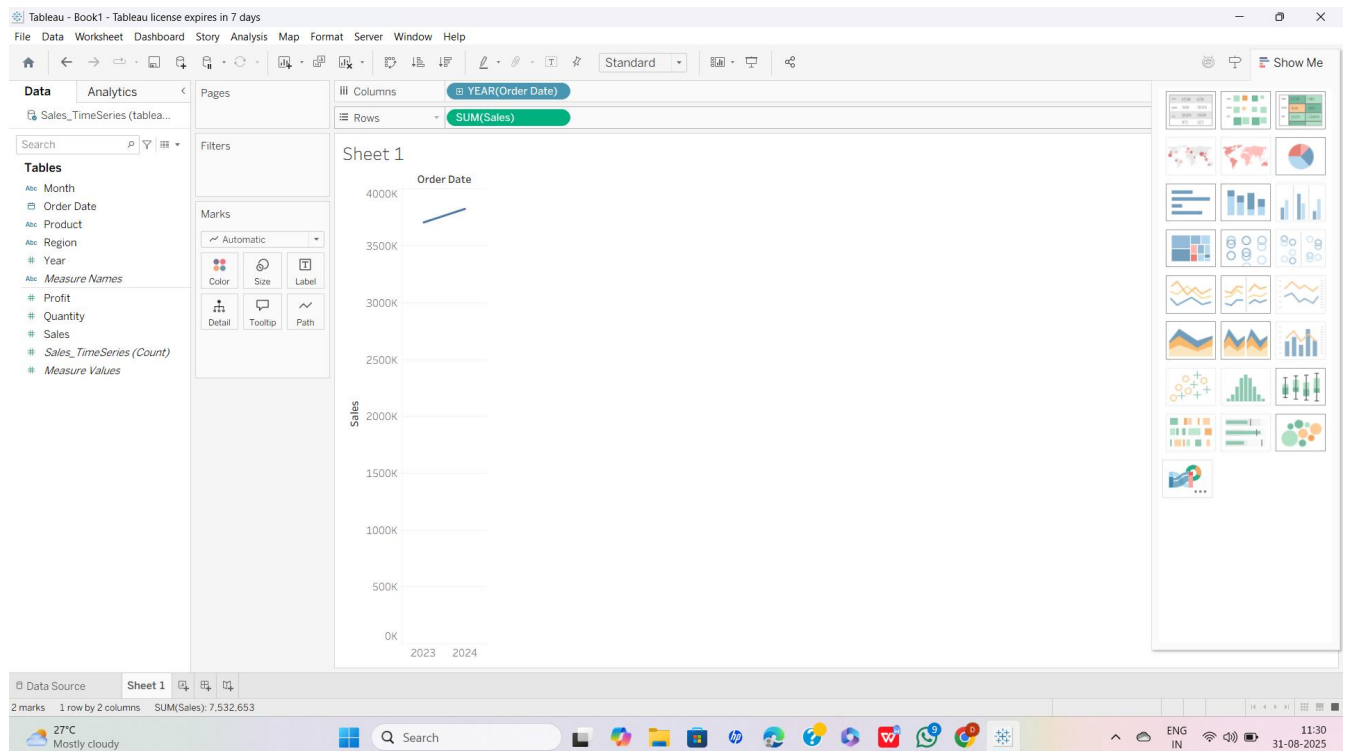
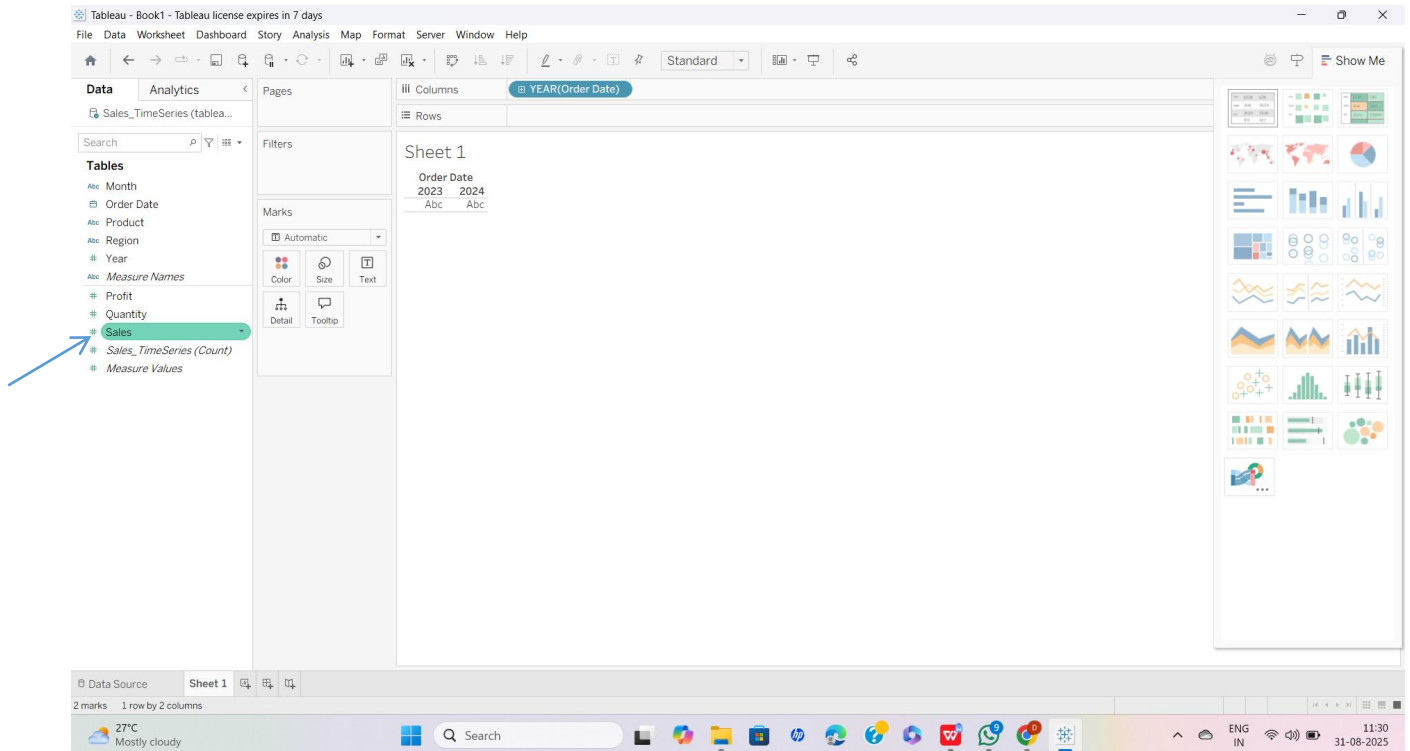
Drop field here

Data Source: Sheet 1

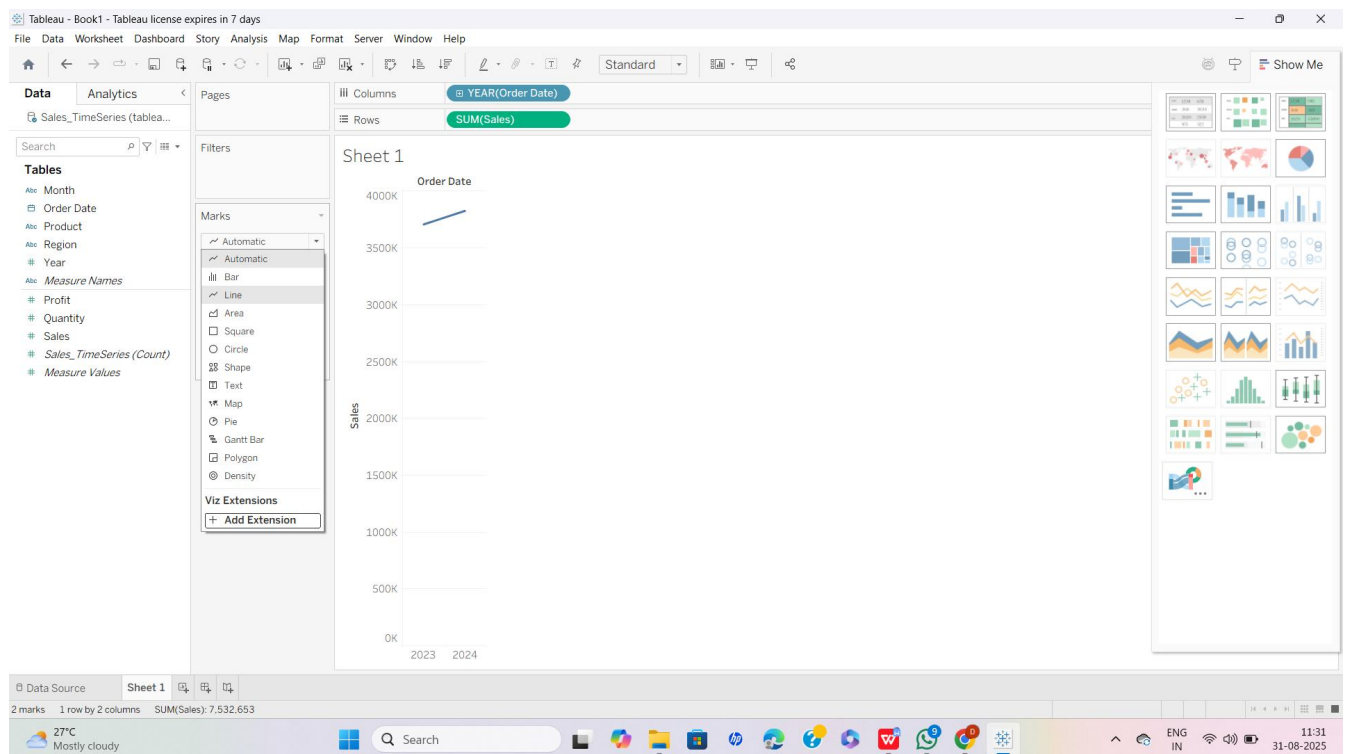
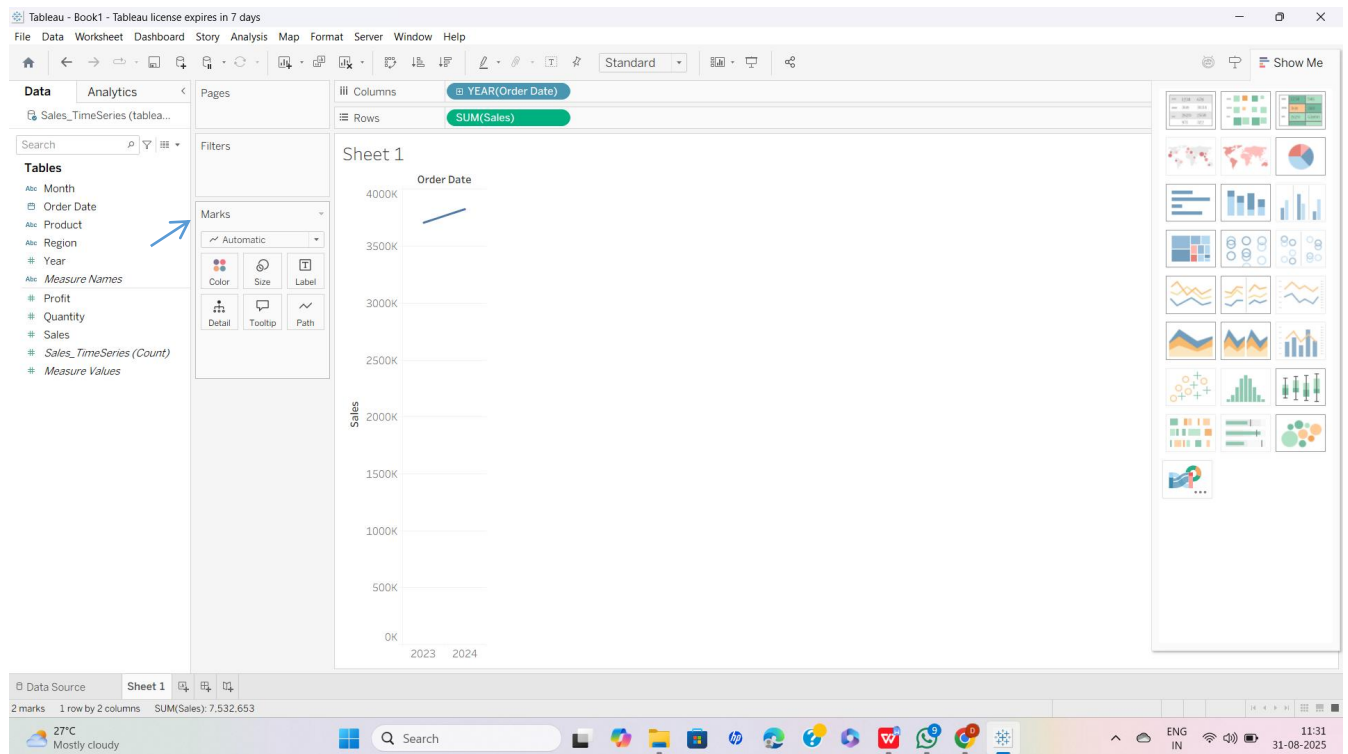
STEP 6 SCREENSHOT (In the Data pane locate the field Order Date (Data type: Date). Drag Order Date to the Columns shelf)



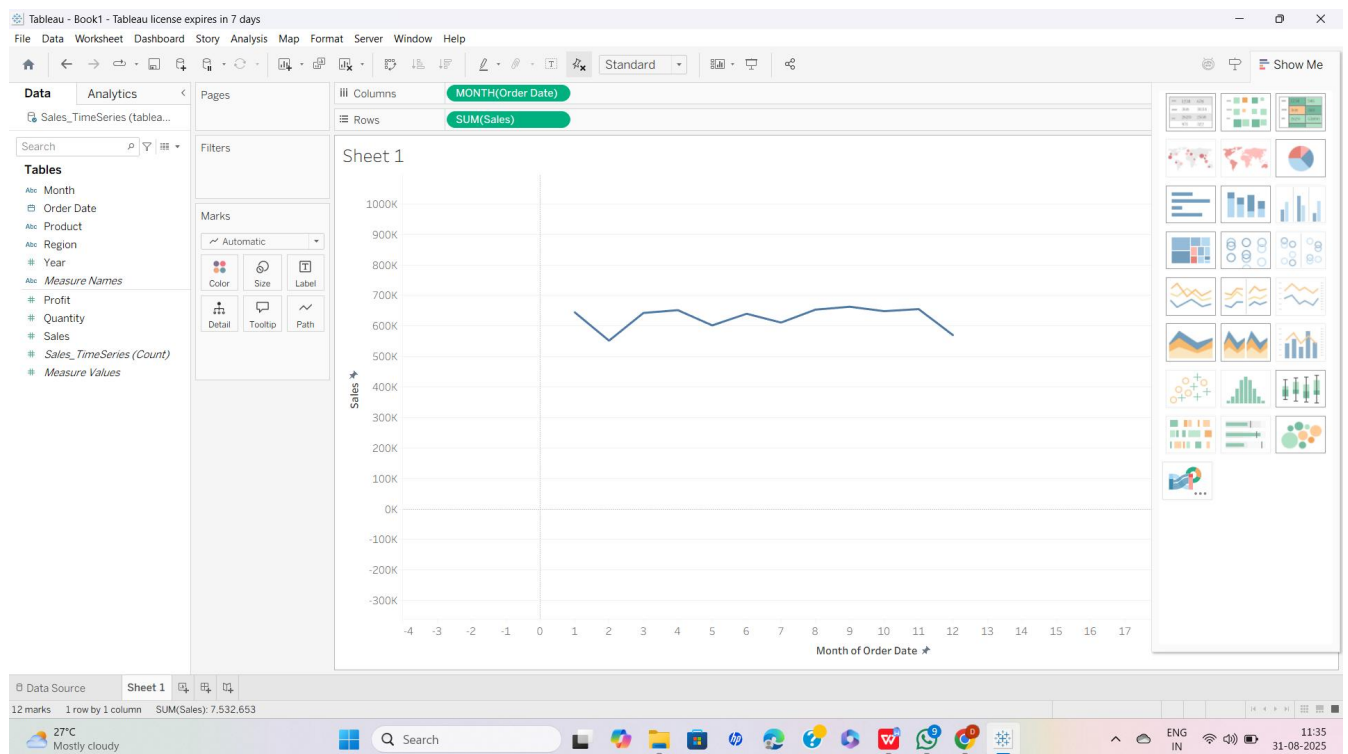
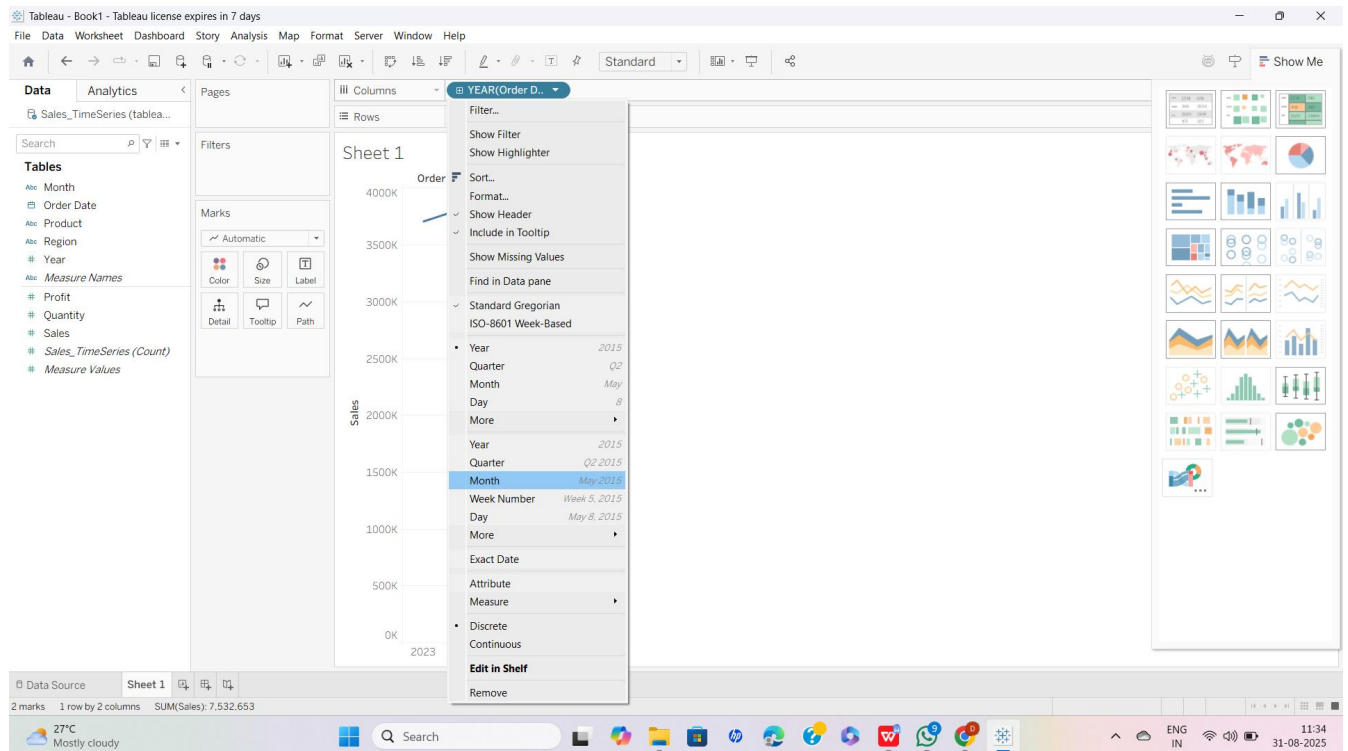
STEP 7 SCREENSHOT (In the Data pane locate Sales (Measure). Drag Sales to the Rows shelf)



STEP 8 SCREENSHOT (On the **Marks card set the mark type to **Line** (click the dropdown that may show Automatic and choose **Line**)).**



STEP 9 SCREENSHOT (If Tableau aggregated by MONTH, and you want continuous dates, click the **Order Date** pill on Columns and choose **Month** → **Continuous** (DATEPART vs DATETRUNC options)).



STEP 10 (Confirm you see a line showing **SUM(Sales)** over time — that's your first visualization)

