2. Connect to Your Data

1. On the **start screen**, under **Connect**, choose the file type:

   o **Microsoft Excel** if your data is in .xlsx

   o **Text file** if it's a .csv

2. In the file chooser, navigate to and select your Retail file (e.g. retail.csv).

3. Tableau opens the **Data Source** tab:

   o You'll see your columns: InvoiceNo, StockCode, Description, Quantity, InvoiceDate, UnitPrice, CustomerID, Country.

   o Check that each field has the correct data type icon:

     ▪ Calendar icon for **InvoiceDate** (Date or Date & Time)

     ▪ ABC for **Description**, **InvoiceNo**, **StockCode**, **CustomerID**, **Country**

     ▪ **(decimal) for Quantity, UnitPrice**

   o If anything's wrong, click its data-type icon and choose the correct type.

---

3. Create the "Sales" Calculated Field

We need a measure that multiplies Quantity × UnitPrice.

1. In the left pane under **Data**, hover over your data source name.

2. Click the down-arrow ▶ and choose **Create Calculated Field…**

3. In the dialog:

   o **Name**: Sales

   o **Formula**:

css

Copy code

```
[Quantity] * [UnitPrice]
```

4. Click **OK**.

5. You'll now see **Sales** under Measures.

4. Build Your Six Sheets

Tip: At the bottom, click the "New Worksheet" icon (sheet with "+") to create each sheet.

a. Sheet 1: Top 10 Products by Total Sales

1. **Rename** the sheet tab (double-click) to "Top 10 Products".

2. On the left:

   o Double-click **Description** → appears on Rows.

   o Double-click **Sales** → appears on Columns as SUM(Sales).

3. To filter to Top 10:

   o On Rows, click the ▼ on **Description** → **Filter…**.

   o In the Filter dialog, go to the **Top** tab.

   o Select **By Field** → Top → **10** by **Sum(Sales)** → **OK**.

4. **Sort** bars descending:

   o Click the SORT icon on the toolbar (or click the Sort icon next to Description on Rows).

5. **Show labels**:

   o On the Marks card, click **Label** → check **Show mark labels**.

6. **Title**: double-click the default title and type "Top 10 Products by Sales".

---

b. Sheet 2: Product Contribution to Total Sales

1. Create a new sheet, name it "Product % of Total".

2. Double-click **Description** (Rows) and **Sales** (Columns).

3. On the Marks card, change type to **Pie**.

4. Drag **Sales** from Measures onto both **Angle** and **Label** on Marks.

5. On the **Sales** pill on Label:

   o Click its drop-arrow → **Quick Table Calculation** → **Percent of Total**.

6. (Optional) Filter to Top N:

   o Use the same Top filter on Description as in Sheet 1, and check **Include Other**.

7. Edit Label:

   o Click **Label** → in text box type:

scss

Copy code

<Description>

<SUM(Sales)> (<Percent of Total:Percent>)

8. Title it "Product Contribution to Total Sales".

---

c. Sheet 3: Month-Wise Sales in 2010

1. New sheet, rename to "2010 Month Sales".

2. Double-click **InvoiceDate** → Tableau defaults to YEAR(InvoiceDate) on Columns.

3. Click the **InvoiceDate** pill on Columns:

   o Choose **Month** (Discrete) instead of Year.

4. Drag **Sales** to Rows.

5. Filter to 2010:

   o Click the ▼ on **InvoiceDate** on Columns → **Filter…** → **Years** → check only **2010** →
   OK.

6. Sort months by sales descending:

   o Click the SORT icon next to InvoiceDate (Months).

7. Show labels: on Marks → Label → check **Show mark labels**.

8. Title: "2010 Month-Wise Sales (Descending)".

---

d. Sheet 4: Most Loyal Customers

1. New sheet, rename to "Loyal Customers".

2. Double-click **CustomerID** on Rows.

3. Drag **InvoiceNo** to Columns; click the drop-arrow on that pill → **Measure** → **Count (Distinct)**.

4. Filter to Top N customers:

    o Click ▼ on **CustomerID** → **Filter…** → **Top** → By Field → Top 10 by **COUNTD(InvoiceNo)** → OK.

5. Sort descending by order count.

6. Show labels: Marks → Label → Show mark labels.

7. Title: "Top 10 Loyal Customers (by Number of Orders)".

---

e. Sheet 5: Yearly Sales Comparison

1. New sheet, rename "Yearly Trend".

2. Double-click **InvoiceDate** → switch pill to **Year** (Discrete) on Columns.

3. Drag **Sales** to Rows.

4. On the Marks card, choose **Line**.

5. (Optional) Drag **InvoiceDate (Year)** to Color for different-year lines.

6. Show labels (if desired): Marks → Label → Show mark labels.

7. Title: "Yearly Sales Comparison".

---

f. Sheet 6: Country-Wise Sales Map

1. New sheet, rename "Sales by Country".

2. Double-click **Country**. Tableau should generate a map.

3. Drag **Sales** to **Color** on Marks (for a filled-map).

4. Adjust color legend: click the legend → **Edit Colors…** → choose a sequential palette.

5. Title: "Country-Wise Total Sales".

---

5. Create a Dashboard

1. Click the **New Dashboard** icon next to the sheet tabs.

2. On left, under **Sheets**, drag each of your six sheets into the dashboard canvas.

3. Arrange in a grid:

   o Top row: "Top 10 Products" & "Product % of Total"

   o Middle row: "2010 Month Sales" & "Yearly Trend"

   o Bottom row: "Loyal Customers" & "Sales by Country"

4. **Add a Title**: double-click the top of the dashboard and type "Retail Sales Analysis".

5. **Size**: set Dashboard Size (top-right) to a preset like **Desktop Browser (1400×900)**.

6. **Global Filters** (optional):

   o Drag, for example, the Year filter from one sheet to the Filters shelf, then click the drop-arrow on that filter in the dashboard and choose **Apply to Worksheets →
   All Using This Data Source**.