

## UNION USING WILDCARD SEARCH

This method is used to set up search criteria to automatically include tables in the union. Use the wildcard character, which is an asterisk (\*), to match a sequence or pattern of characters in the Excel workbook and worksheet names, Google Sheets workbook and worksheet names, text file names, JSON file names, .pdf file names, and database table names.

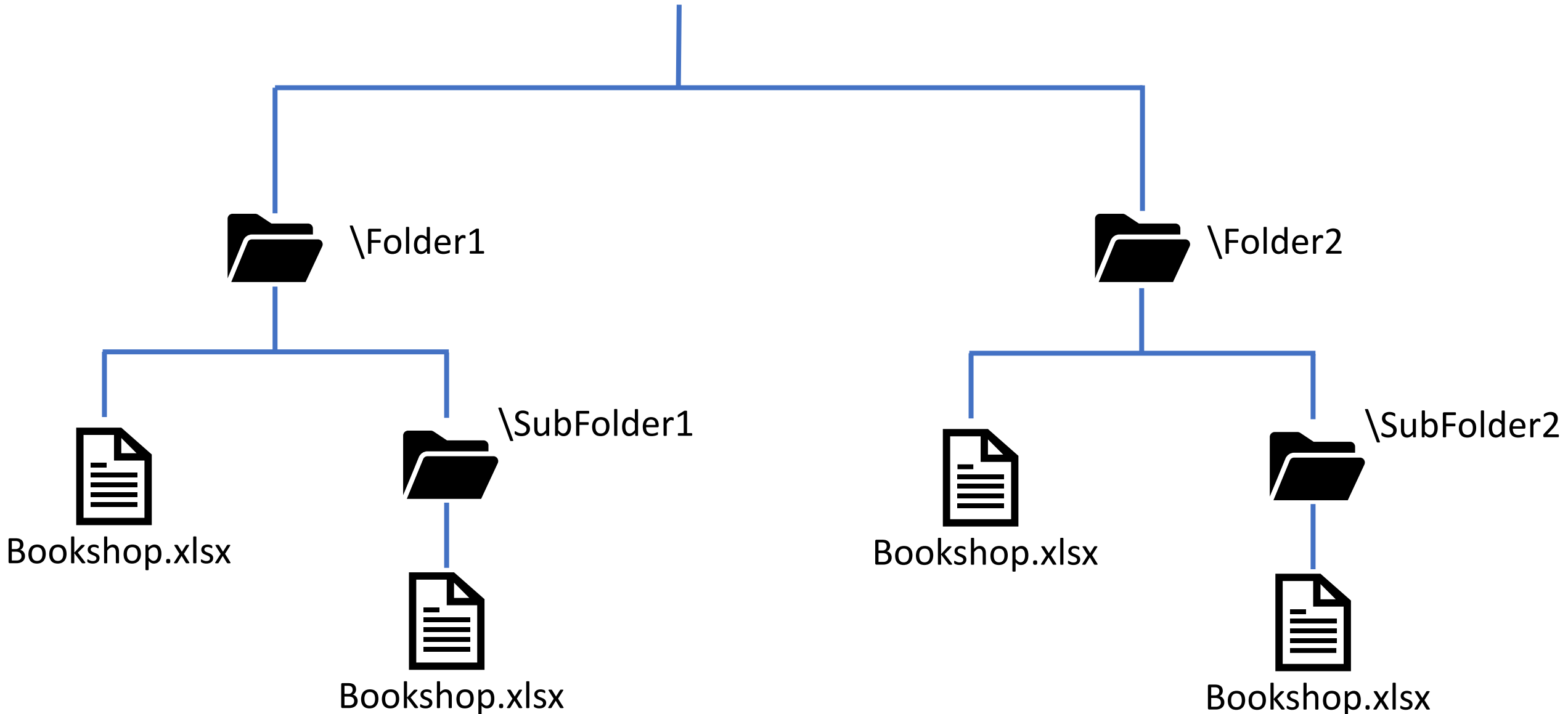
When working with Excel, text file data, JSON file, .pdf file data, we can also use this method to union files across folders, and worksheets across workbooks. Search is scoped to the selected connection. The connection and the tables available in a connection are shown on the left pane of the Data source page.

# UNION USING WILDCARD SEARCH

Directory Structure for this example

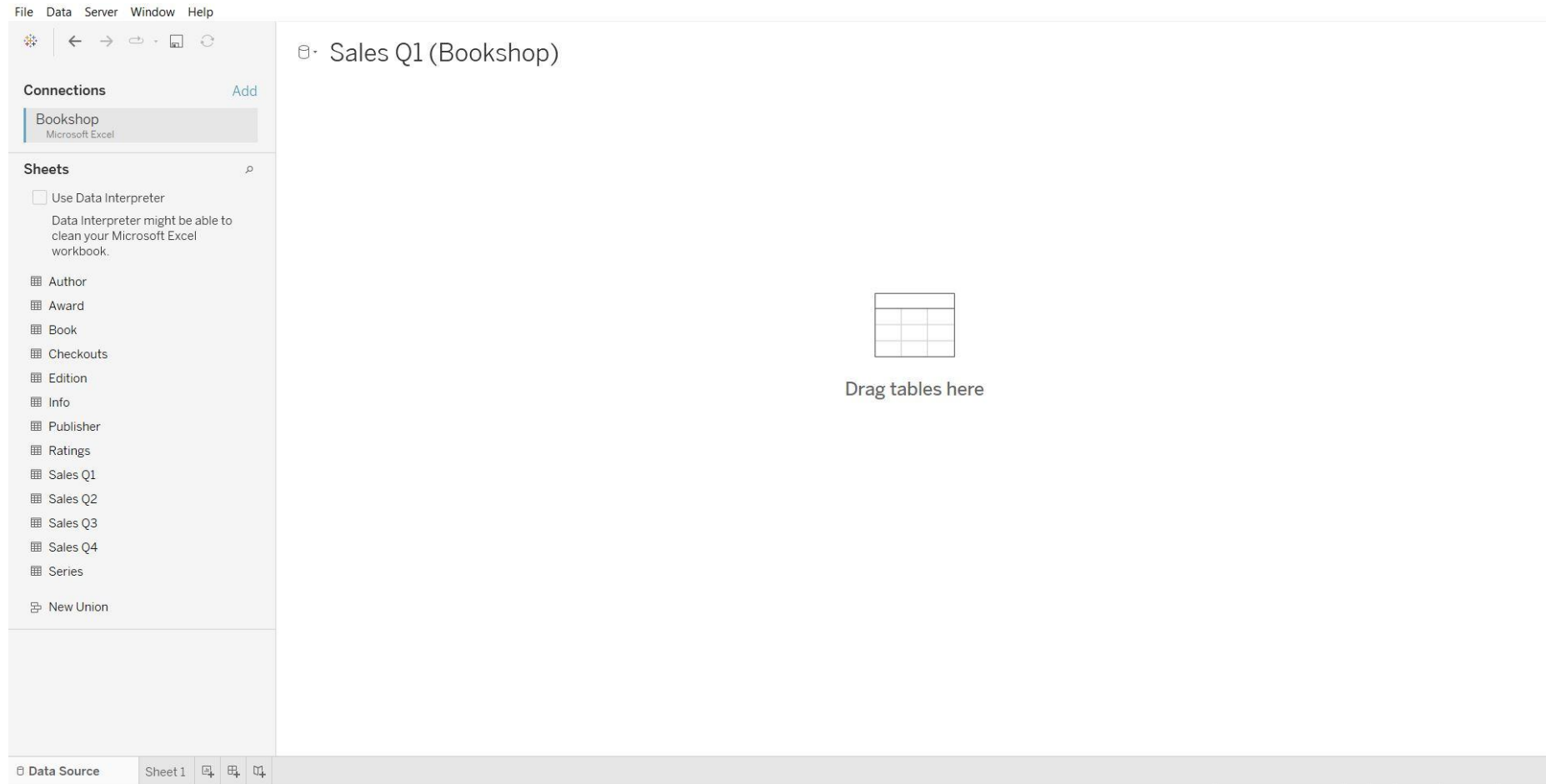


C:\Union



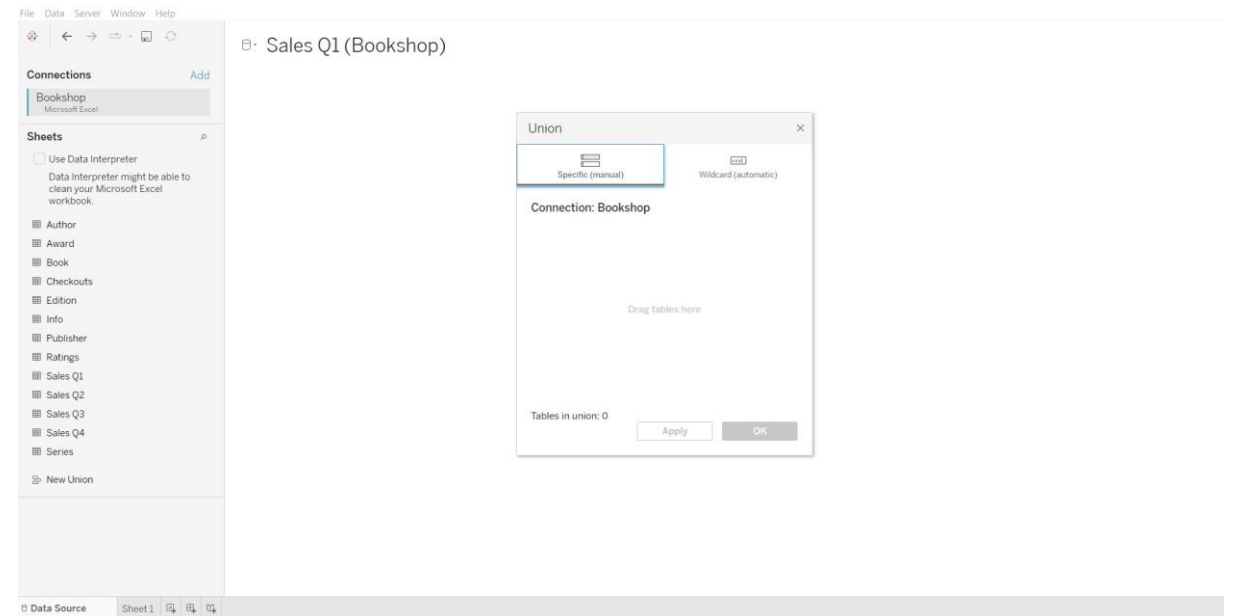
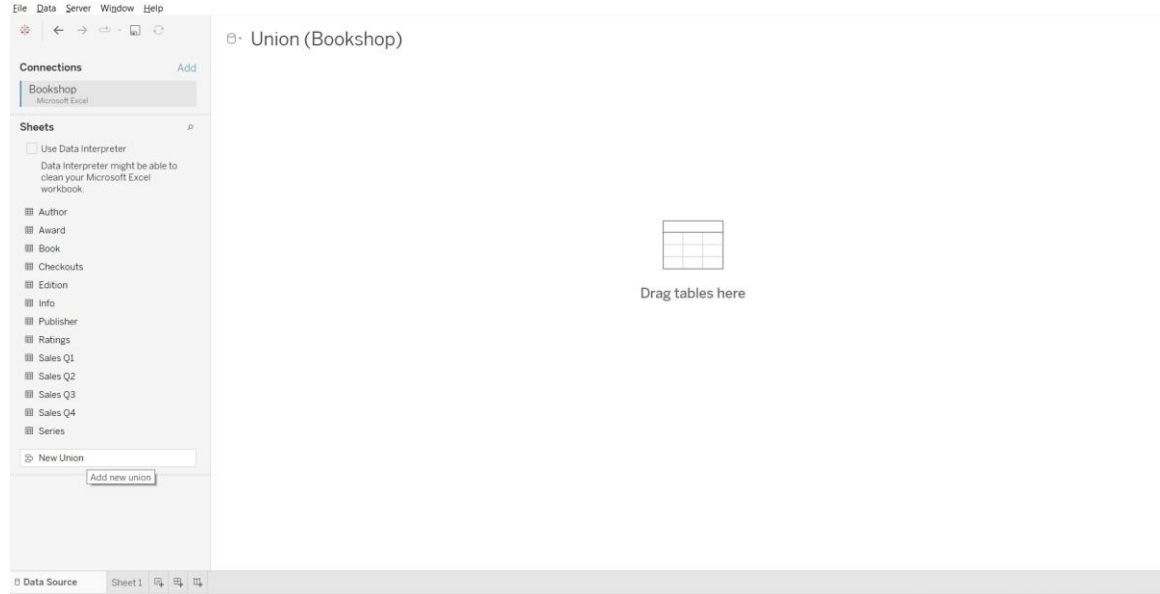
# UNION USING WILDCARD SEARCH

## Step 1: Connect to the data source **Bookshop.xlsx**



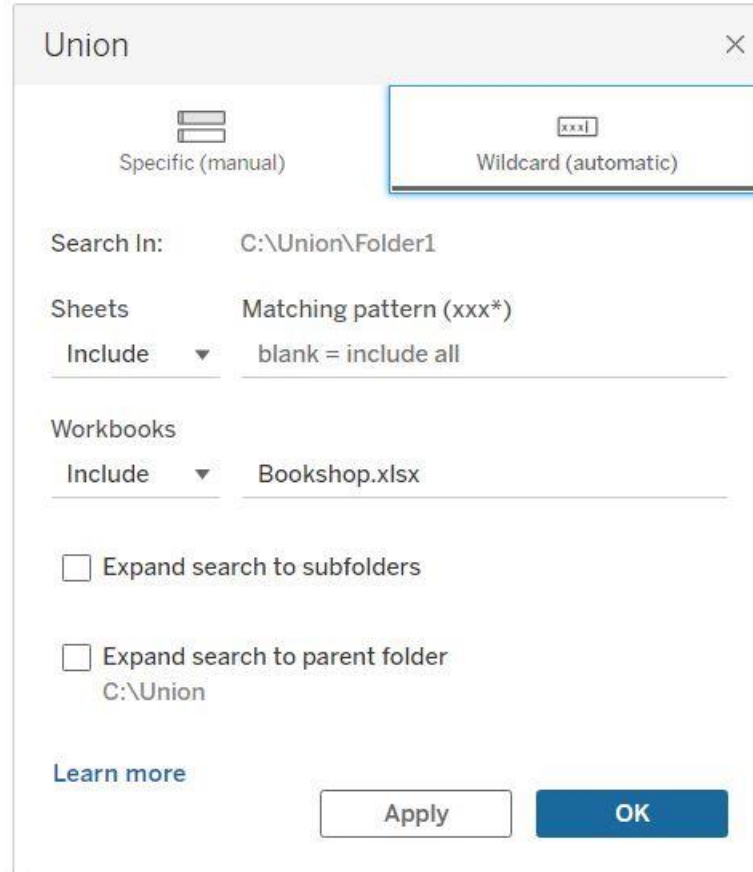
# UNION USING WILDCARD SEARCH

**Step 2:** On the **Data Source** page, double-click **New Union** to set up the union



# UNION USING WILDCARD SEARCH

**Step 3:** Click **Wildcard (automatic)** in the **Union** dialog box

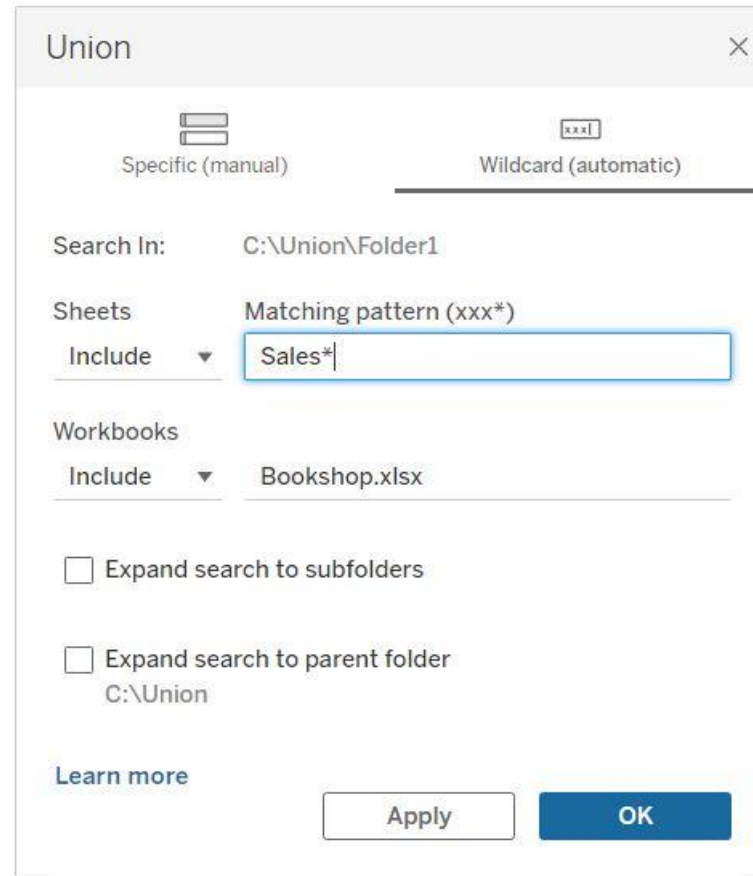


# UNION USING WILDCARD SEARCH

**Step 4:** Enter the search criteria that we want Tableau to use to find tables to include in the union

For example, we can enter **Sales\*** in the **Include** text box to union tables in Excel worksheets that have “Sales\*” in their names

Click on **Apply** or **OK** to union



The screenshot shows the 'Union' dialog box in Tableau. The 'Wildcard (automatic)' tab is selected. The 'Search In:' field is set to 'C:\Union\Folder1'. Under the 'Sheets' section, the 'Include' dropdown is set to 'Matching pattern (xxx\*)' and the text box contains 'Sales\*'. Under the 'Workbooks' section, the 'Include' dropdown is set to 'Bookshop.xlsx'. There are two unchecked checkboxes: 'Expand search to subfolders' and 'Expand search to parent folder C:\Union'. At the bottom, there are 'Apply' and 'OK' buttons, and a 'Learn more' link.

Search criteria like this will result in the union of **Sales Q1**, **Sales Q2**, **Sales Q3** and **Sales Q4** (Excel worksheets), from the selected connection. In this case the connection made to the Excel workbook (Bookshop.xlsx) containing the worksheets we wanted was in the **Folder1** folder in the **Union** directory (e.g., **C:\Union\Folder1**)

# UNION USING WILDCARD SEARCH

## Step 5: The Union is created

File Data Server Window Help

Connections [Add](#)

Bookshop  
Microsoft Excel

Sheets [p](#)

☐ Use Data Interpreter  
Data Interpreter might be able to clean your Microsoft Excel workbook.

- Author
- Award
- Book
- Checkouts
- Edition
- Info
- Publisher
- Ratings
- Sales Q1
- Sales Q2
- Sales Q3
- Sales Q4
- Series

[New Union](#)

Union (Bookshop)

Connection  
☒ Live ☐ Extract

Filters  
0 | [Add](#)

Union

Need more data?  
Drag tables here to relate them. [Learn more](#)

Union 7 fields 56350 rows 100 rows

Name	Union	Union	Union	Union	Union	Union	Union
	Sale Date	ISBN	Discount	ItemID	OrderID	Path	Sheet
02-01-2193	989-28-3705-007-2	null	107020-91-8011	107020-1	Folder1/Bookshop.xlsx	Sales Q1	
02-01-2193	989-28-79-11297-4	null	107020-9-3293	107020-10	Folder1/Bookshop.xlsx	Sales Q1	
02-01-2193	989-28-79-11297-4	null	107020-91-4622	107020-11	Folder1/Bookshop.xlsx	Sales Q1	
02-01-2193	989-28-79-18127-7	null	107020-38-4663	107020-12	Folder1/Bookshop.xlsx	Sales Q1	
02-01-2193	989-28-79-82197-5	0.150000	107020-1-1485	107020-13	Folder1/Bookshop.xlsx	Sales Q1	
02-01-2193	989-28-79-05638-4	null	107020-52-7106	107020-14	Folder1/Bookshop.xlsx	Sales Q1	

Type	Field Name	Physical Table	Remote Field Name
Union	Sale Date	Union	Sale Date
Abc	ISBN	Union	ISBN
#	Discount	Union	Discount

Data Source Sheet 1

# UNION USING WILDCARD SEARCH

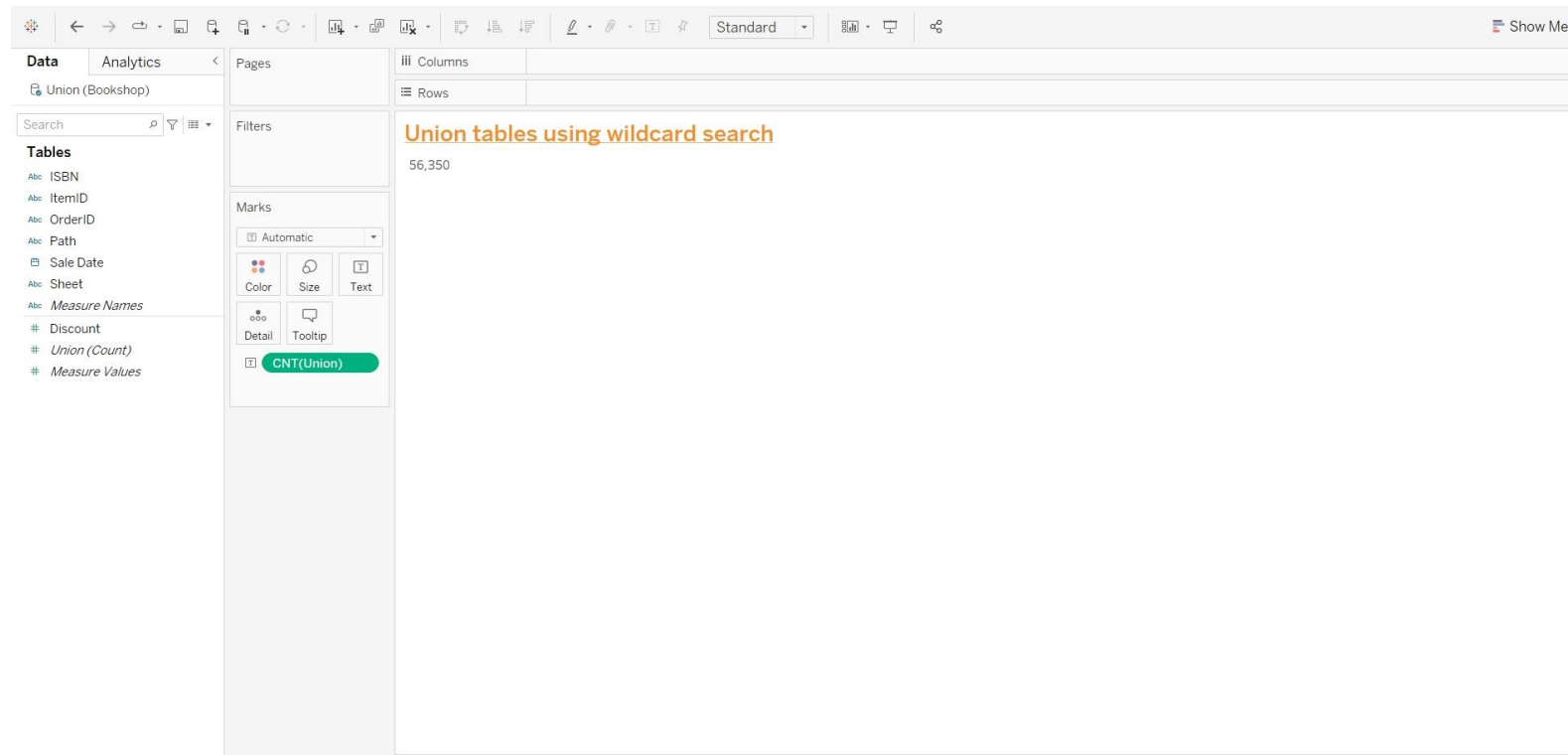
**Step 6: Go to Sheet 1 and drag & drop **Union(Count)** to **Text** on **Marks** card**

The screenshot displays the Tableau Desktop interface. On the left, the 'Data' pane shows a list of fields under the 'Union (Bookshop)' dataset. The 'Measures' section includes 'Discount', 'Union (Count)', and 'Measure Values'. The 'Marks' card is currently set to 'Automatic'. A green callout bubble with the text 'CNT(Union)' is positioned over the 'Text' mark type icon in the Marks card. The main view area shows a worksheet titled 'Union tables using wildcard search' with a grid layout. The top row is labeled 'Drop field here' and the bottom row is labeled 'Drop field here'.



# UNION USING WILDCARD SEARCH

**Step 7:** The total number of rows in all Sales Q1, Sales Q2, Sales Q3 and Sales Q4 is the **CNT(Union)** i.e., 56,350  
This confirms that the **Union** was created correctly



The CNT(Union) value was validated separately

**CNT of Sales Q1: 7,785**

**CNT of Sales Q2: 13,354**

**CNT of Sales Q3: 22,118**

**CNT of Sales Q3: 13,093**

**Total of CNT: 56,350**

# UNION USING WILDCARD SEARCH

## Step 8: Click on Clear Sheet

The screenshot displays the Tableau Desktop interface. The top toolbar contains various icons for navigation and editing. A tooltip for the 'Clear Sheet' icon (a document with an 'X') is visible, displaying the text 'Clear Sheet (Alt+Shift+Backspace)'. The left sidebar shows the 'Data' pane with a search bar and a list of tables: ISBN, ItemID, OrderID, Path, Sale Date, Sheet, Measure Names, Discount, Union (Count), and Measure Values. The central workspace is divided into 'Columns' and 'Rows' shelves. The 'Columns' shelf contains the text 'Union tables using wildcard search' and the value '56,350'. The 'Rows' shelf is empty. The bottom of the interface shows the 'Marks' card with the 'Automatic' mark type selected, and a green pill labeled 'CNT(Union)'.

Clear Sheet (Alt+Shift+Backspace)

Union tables using wildcard search

56,350

CNT(Union)

# UNION USING WILDCARD SEARCH

**Step 9: Go to the Data Source page**  
**Right-click on Union, Click on Edit Union**

File Data Server Window Help

Connections [Add](#)

Bookshop  
Microsoft Excel

Sheets

☐ Use Data Interpreter  
Data Interpreter might be able to clean your Microsoft Excel workbook.

- Author
- Award
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- Checkouts
- Edition
- Info
- Publisher
- Ratings
- Sales Q1
- Sales Q2
- Sales Q3
- Sales Q4
- Series

[New Union](#)

Union (Bookshop)

Connection  
☒ Live ☐ Extract

Filters  
0 [Add](#)

Union

Open...  
Rename  
Remove  
☒ Field names are in first row  
Generate field names automatically  
**Edit Union...**

Need more data?  
Drag tables here to relate them. [Learn more](#)

Union 7 fields 56350 rows 100 rows

Name	Union	Union	Union	Union	Union	Union
Union	Sale Date	ISBN	Discount	ItemID	OrderID	Path
	02-01-2193	989-28-3705-007-2	null	107020-91-8011	107020-1	Folder1/Bookshop.xlsx
	02-01-2193	989-28-79-11297-4	null	107020-9-3293	107020-10	Folder1/Bookshop.xlsx
	02-01-2193	989-28-79-11297-4	null	107020-91-4622	107020-11	Folder1/Bookshop.xlsx
	02-01-2193	989-28-79-18127-7	null	107020-38-4663	107020-12	Folder1/Bookshop.xlsx
	02-01-2193	989-28-79-82197-5	0.150000	107020-1-1485	107020-13	Folder1/Bookshop.xlsx
	02-01-2193	989-28-79-05638-4	null	107020-52-7106	107020-14	Folder1/Bookshop.xlsx

Type	Field Name	Physical Table	Remote Field Name
Union	Sale Date	Union	Sale Date
Abc	ISBN	Union	ISBN
#	Discount	Union	Discount

Data Source Sheet 1

# UNION USING WILDCARD SEARCH

**Step 10:** Select the checkbox for **Expand search to subfolders**  
Click on **Apply** or **OK** to union

Union

Specific (manual) Wildcard (automatic)

Search In: C:\Union\Folder1

Sheets Matching pattern (xxx\*)

Include Sales\*

Workbooks

Include Bookshop.xlsx

☒ Expand search to subfolders

☐ Expand search to parent folder  
C:\Union

[Learn more](#)

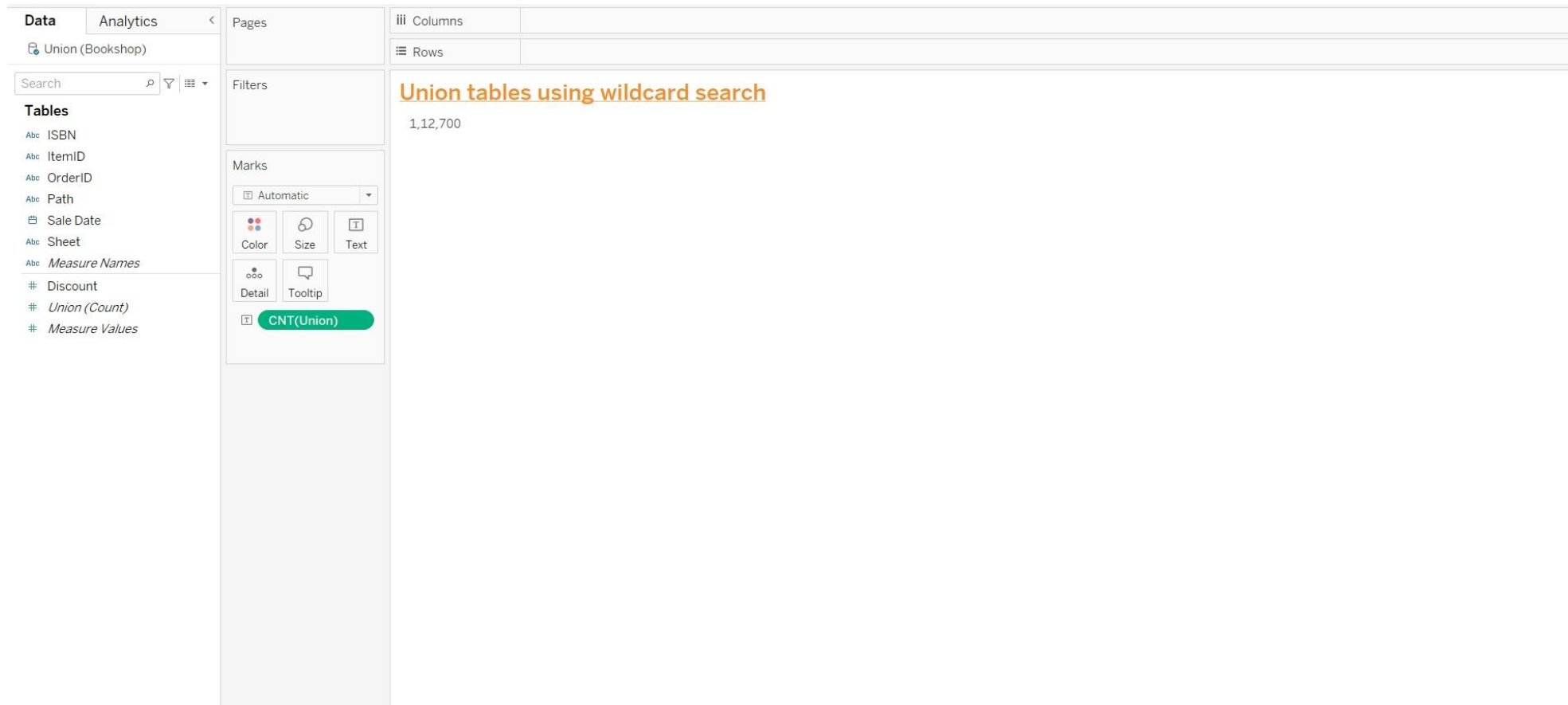
Apply OK

**Include:** Looks for all Excel worksheets that have "Sales\*" in their names inside the current folder i.e., **Folder1**

**Expand search to subfolders:** Looks for additional Excel worksheets that have "Sales\*" in their names that are in Excel workbooks in subfolders of the "Folder1" folder i.e., **SubFolder1**.

# UNION USING WILDCARD SEARCH

**Step 11:** Go to Sheet 1 and drag & drop **Union(Count)** to **Text** on **Marks** card  
Now the **CNT(Union)** has doubled 1,12,700 since we are including the files in the sub-folders too



# UNION USING WILDCARD SEARCH

## Step 12: Click on Clear Sheet

The screenshot displays the Tableau Desktop interface. The top toolbar contains various icons for navigation and editing. A tooltip for the 'Clear Sheet' icon (a document with an 'X') is visible, showing the keyboard shortcut 'Clear Sheet (Alt+Shift+Backspace)'. The main workspace shows a table with the title 'Union tables using wildcard search' and a single row with the value '1,12,700'. The left sidebar shows the 'Data' pane with a search bar and a list of tables: ISBN, ItemID, OrderID, Path, Sale Date, Sheet, Measure Names, Discount, Union (Count), and Measure Values. The 'Marks' card is set to 'Automatic' and shows a green pill for 'CNT(Union)'. The 'Columns' and 'Rows' shelves are empty.

Clear Sheet (Alt+Shift+Backspace)

Union tables using wildcard search

1,12,700

Clear Sheet (Alt+Shift+Backspace)

Standard

Show Me

Data Analytics

Union (Bookshop)

Search

Tables

- ISBN
- ItemID
- OrderID
- Path
- Sale Date
- Sheet
- Measure Names
- Discount
- Union (Count)
- Measure Values

Filters

Marks

Automatic

Color Size Text

Detail Tooltip

CNT(Union)

# UNION USING WILDCARD SEARCH

**Step 13:** Go to the **Data Source** page

Right-click on **Union**, Click on **Edit Union**

Select checkbox for **Expand search to parent folder**

Click on **Apply** or **OK** to union

Union

Specific (manual) Wildcard (automatic)

Search In: C:\Union\Folder1

Sheets Matching pattern (xxx\*)

Include Sales\*

Workbooks

Include Bookshop.xlsx

☒ Expand search to subfolders

☒ Expand search to parent folder  
C:\Union

[Learn more](#)

Apply OK

**Include:** Looks for all Excel worksheets that have "Sales\*" in their names inside the current folder i.e., Folder1

**Expand search to parent folder:** Looks for additional Excel worksheets that have "Sales\*" in their names that are in parallel folders of the "Folder1" folder. In this example, "Folder2" is the parallel folder.

**Expand search to subfolders:** Looks for additional Excel worksheets that have "Sales\*" in their names that are in Excel workbooks in all folders and Sub-folders applicable

# UNION USING WILDCARD SEARCH

**Step 14:** Go to Sheet 1 and drag & drop **Union(Count)** to **Text** on **Marks** card  
Now the **CNT(Union)** has increased to 2,25,400 since we are including the files in the sub-folders and the files in parent directory

