Microsoft Power Platform

Modern Excel Analyst in a Day

Lab 02A

Mapping Learning to Power BI – Import to Power BI Desktop

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Overview

The estimated time to complete this lab is 20 minutes.

In this lab, you will complete the following tasks:

1. Import from Excel to Power BI Desktop: Customers & Quotes queries & tables
2. Edit imported Queries to Include a Dates table
3. Close Power Query & Load the Dates table to the Data Model

NOTE: This lab has been created based on the sales activities of the *fictitious* Wi-Fi company called SureWi which has been provided by P3 Adaptive https://p3adaptive.com/. The data is property of P3 Adaptive and has been shared with the purpose of demonstrating Excel and Power BI functionality with industry sample data. Any use of this data must include this attribution to P3 Adaptive.

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Exercise 1: Import from Excel to Power BI Desktop: Customers & Quotes queries and tables

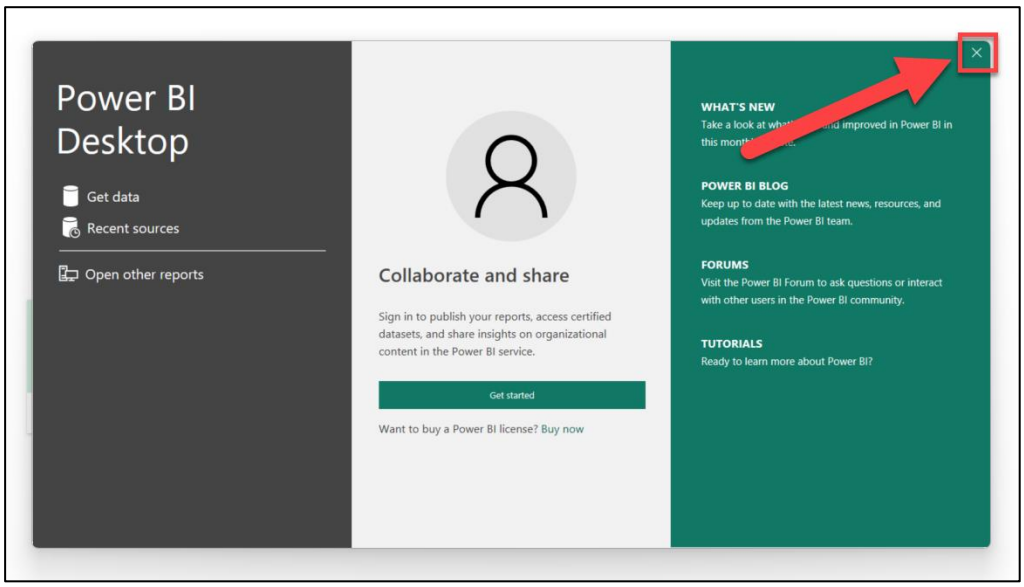
In this exercise, you will launch Power BI Desktop and import the Customers & Quotes queries and tables from Excel to Power BI Desktop.

Task 1: Launch Power BI Desktop

In this task, you will launch Power BI Desktop and save the new PBIX file.

1. Launch **Power BI Desktop**.

2. If applicable, use the **X** in the upper right-hand corner to **close** the Welcome window.



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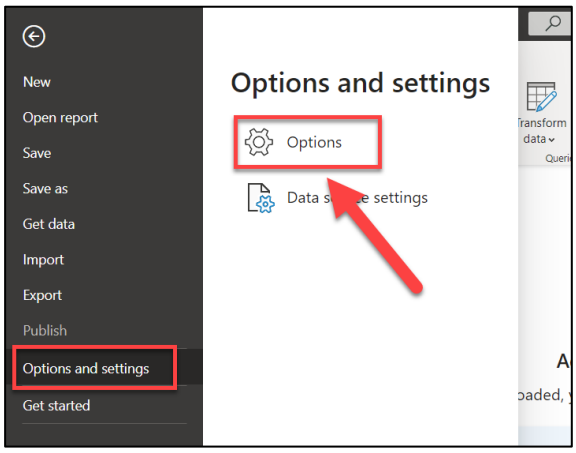
Task 2: Verify Settings

3. From the ribbon at the top of the screen, select **File**.

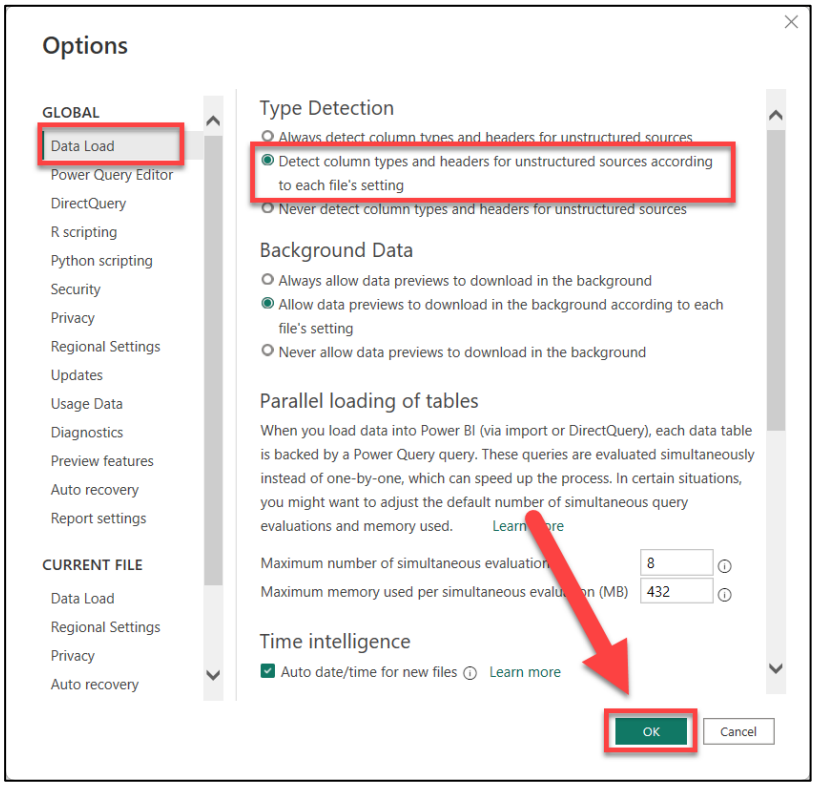
4. Then, select **Options and settings** from the list to the left of the screen. Select **Options**.



5. Within the Options dialog window, under the **Global** section, select **Data Load**.

6. Under the **Type Detection** section, ensure that the option for **Detect column type and headers for unstructured sources according to each file's settings** is selected.

7. Then, select **OK**.



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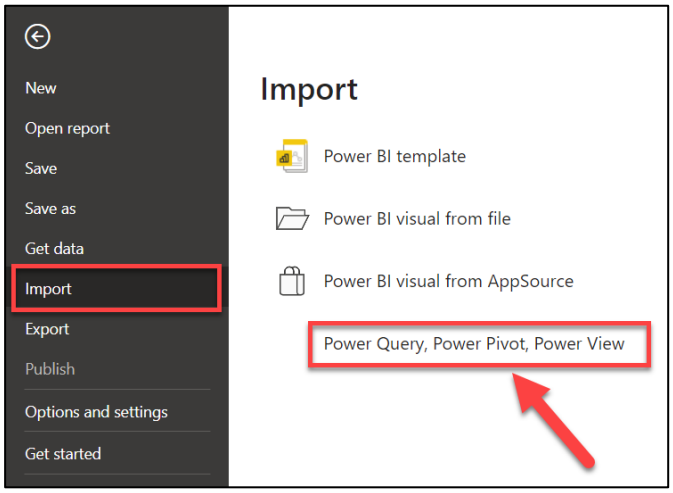
Task 3: Import Power Query, Power Pivot, Power View

In this task, you will navigate and open the starting XLSX file then start the import process.

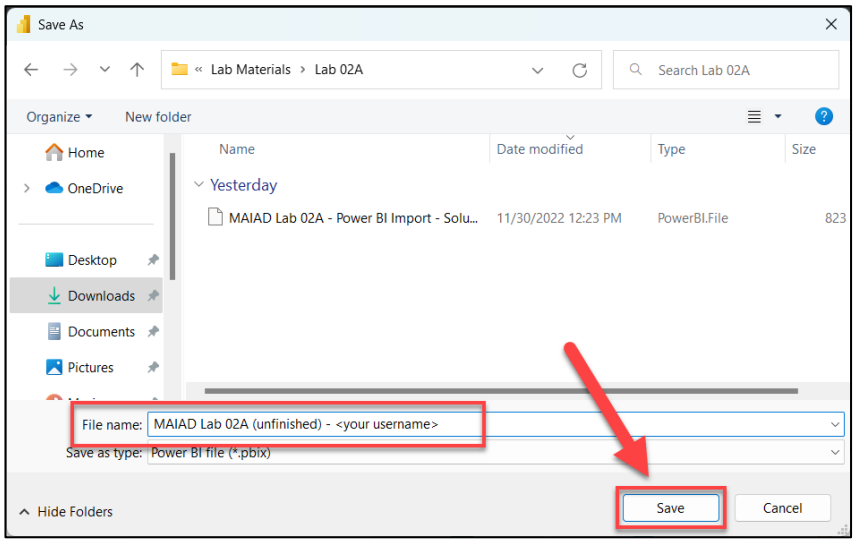
8. From the ribbon at the top of the screen, select the **File** tab.
9. From the list of options to the left of the screen, select **Import**.
10. Then, select the **Power Query, Power Pivot, Power View** option.



Note: You may be asked if you want to save your changes before you can move forward. If so, select *Save*.

Enter in a temporary name for this file and choose an "easy to locate" location that will be easy to identify and find later on.

You may have to go back and repeat steps 8-10 in order to pick up where you left off before you had to save your file.



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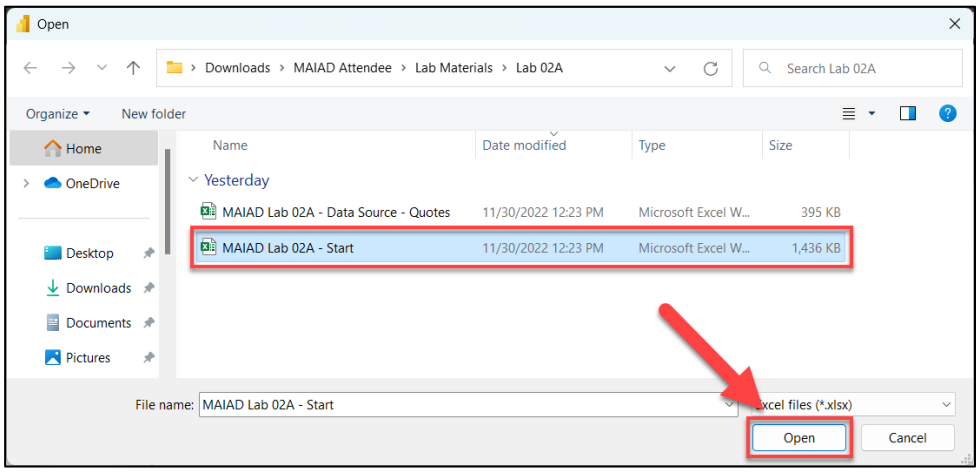
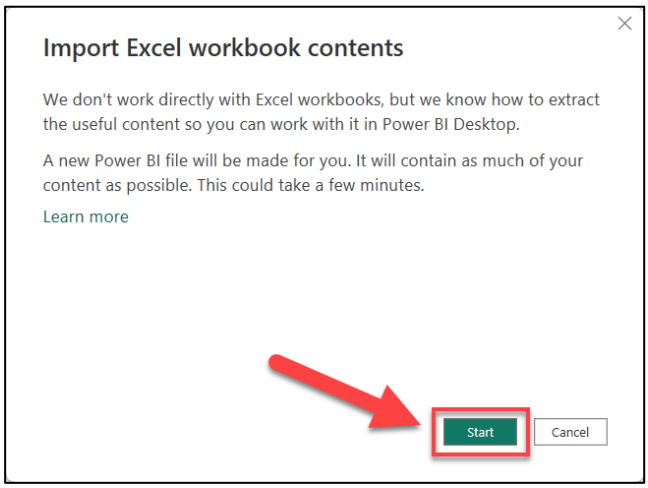
11. Navigate to the **<CourseFolder>\MAIAD Attendee\Lab Materials\Lab 02A** folder.

12. Select the file **MAIAD Lab 02A – Start.xlsx** and choose **Open**.

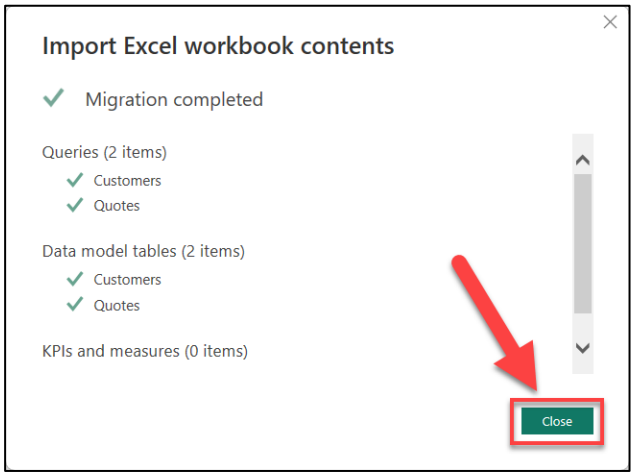


13. Select the **Start** button to begin the import.



14. View the **Import Excel workbook contents** report.

15. Then, select the **Close** button.



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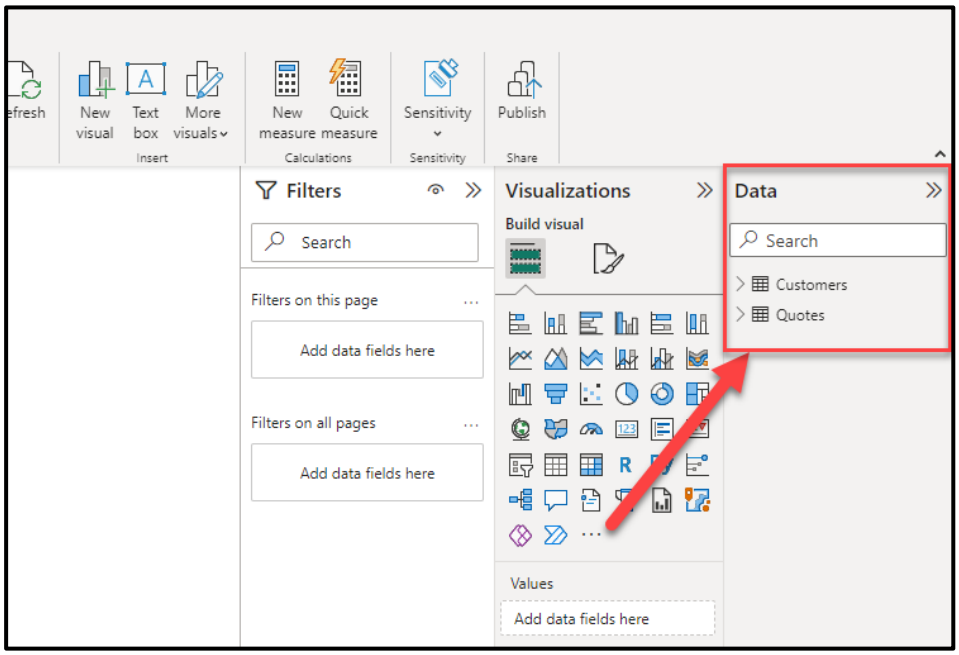
> **Note:** When importing from Excel to Power BI Desktop, it is a one-way transition. Any Queries, Data Model tables, KPIs and measures will be imported into Power BI Desktop. Any subsequent imports with the same file name will overwrite the existing PBIX.

16. Notice that the **Customers** and **Quotes** tables are available within the **Data** pane to the right of the screen.

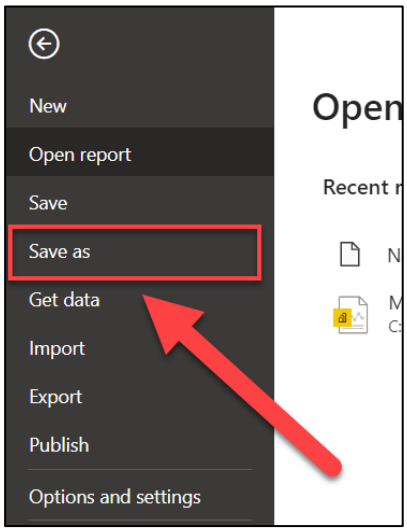


Task 4: Save the PBIX file

In this task, you will save the file with a new file name.

17. From the ribbon at the top of the screen, select the **File** tab.

18. Then, select **Save As**.



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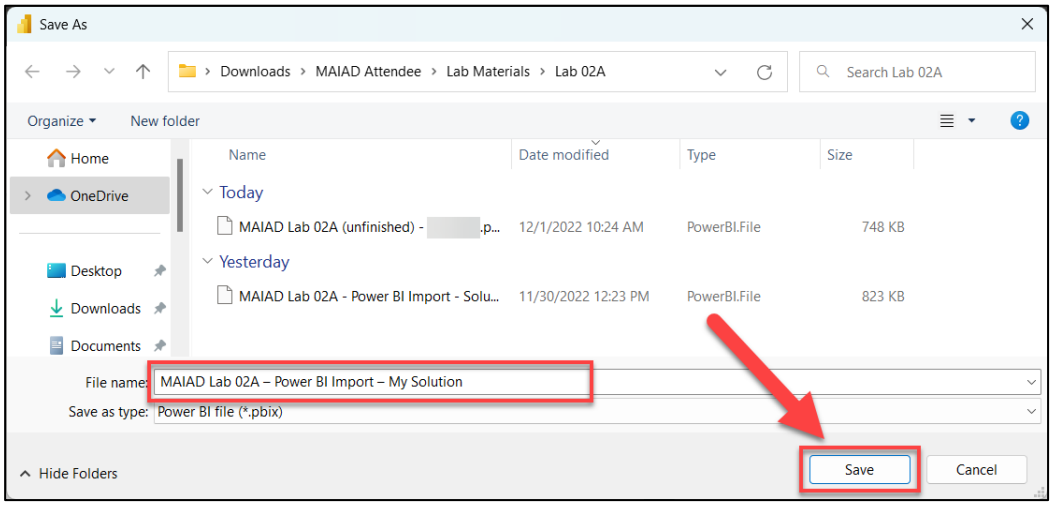
19. Save the file within the **\MAIAD Attendee\Lab Materials\Lab 02A** folder. Save the file with the **name** as **MAIAD Lab 02A – Power BI Import – My Solution.pbix**.



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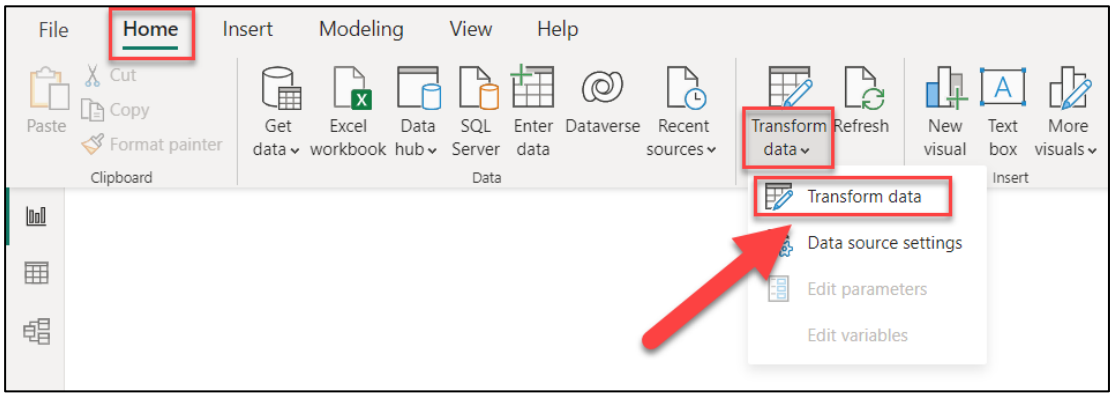
Exercise 2: Edit imported Queries to Include a Dates table

In this exercise, you will launch the Power Query Editor from BI Desktop and edit the imported Queries to add a new Dates query and table to the Data Model.

Task 1: Launch Power Query from Power BI Desktop

In this task, you will launch Power Query from Power BI Desktop and edit the existing queries to add a new Dates table.

20. From the **Home** tab in the ribbon, select the **Transform data** drop-down. Then, select the **Transform data** option from the drop down.



> **Note:** This will launch Power Query from Power BI Desktop – notice it looks very similar to Power Query in Excel and both the Customers and Quotes queries have been imported with their transformation.

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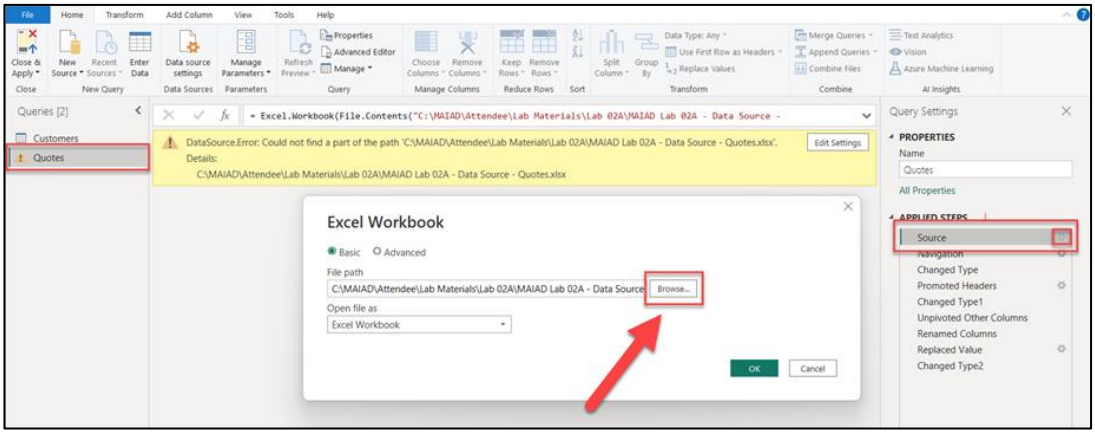
Note: If you are getting the error message:

DataSource.Error: Could not find a part of the path 'C:\MAIAD Attendee\Lab Materials\Lab 02A\MAIAD Lab 02A - Data Source - Customers.csv'.
Details:
C:\MAIAD Attendee\Lab Materials\Lab 02A\MAIAD Lab 02A - Data Source - Customers.csv

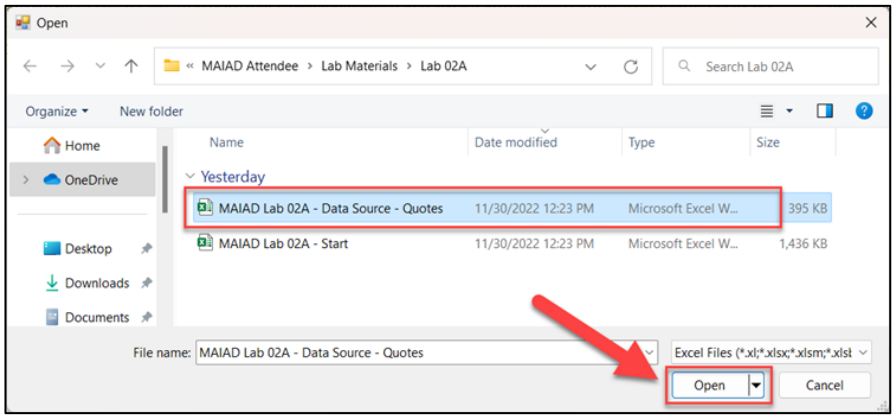
This means that your class files are not in the expected location.

You'll need to repeat the following steps for each Query that has an error message.

1. Select the Query you desire to fix from the **Queries** pane to the left of the screen.
2. From the **Query Settings** pane to the right of the screen, under the **Applied Steps** list, select the **Source** step.
3. Select the **gear icon** to the right of the source step.
4. Within the **Excel Workbook** dialog window, select the **Browse** button. Here is where you will navigate to the correct file path.



5. Then, select the correct file for the query you have selected.
6. Then, choose **Open**.



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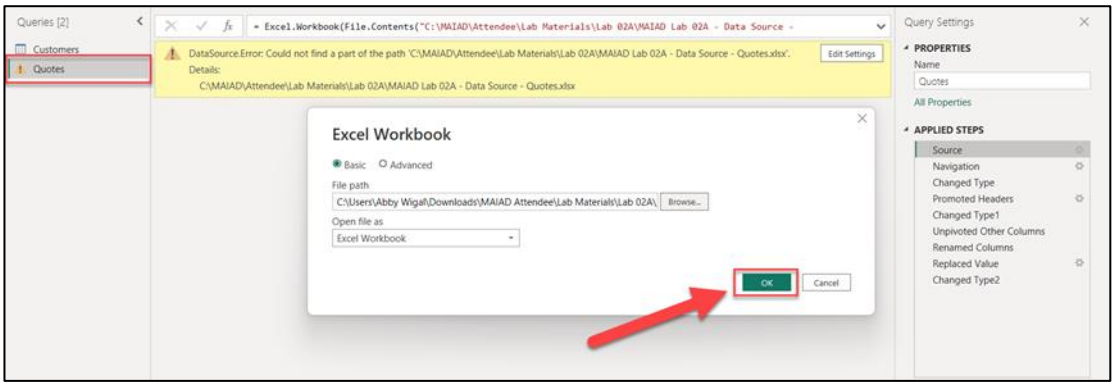
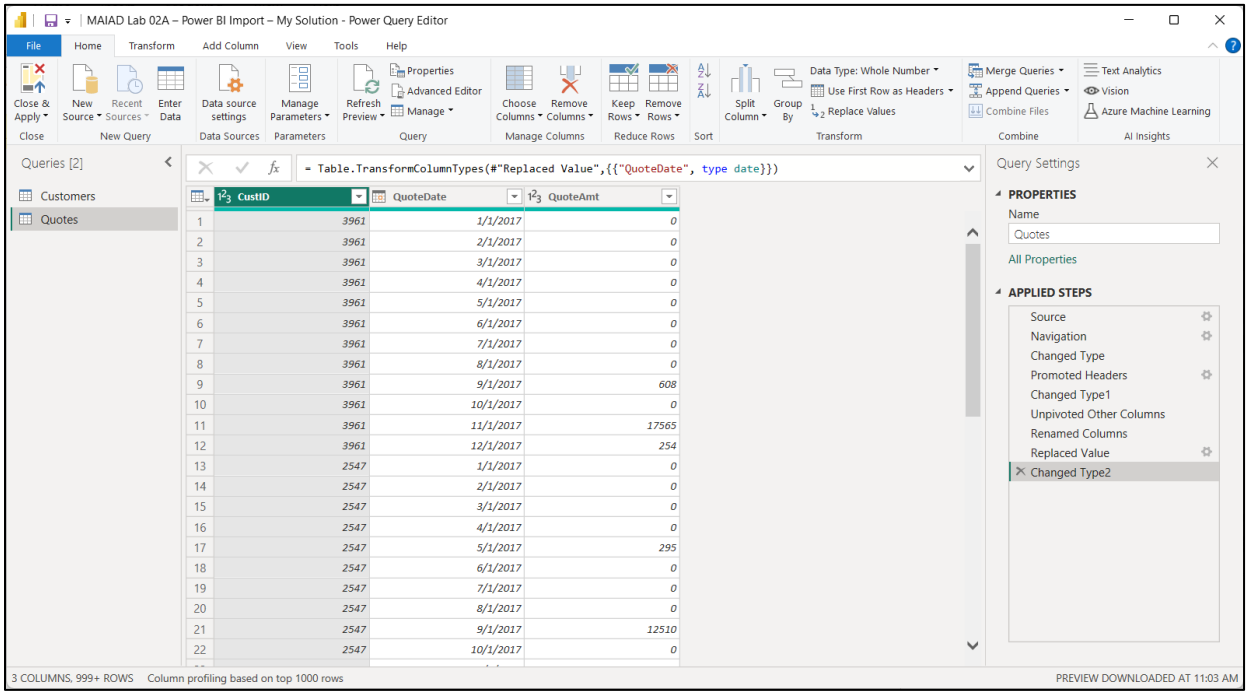
7. Then, select **OK** within the **Excel Workbook** dialog window. You will now see that the Error message has disappeared; this means that the Query has the correct file path attached.



You may also use the **Home** > **Data source settings** > **Change source** from the ribbon to change Query data source settings.

Your screen should look similar to the one shown below:



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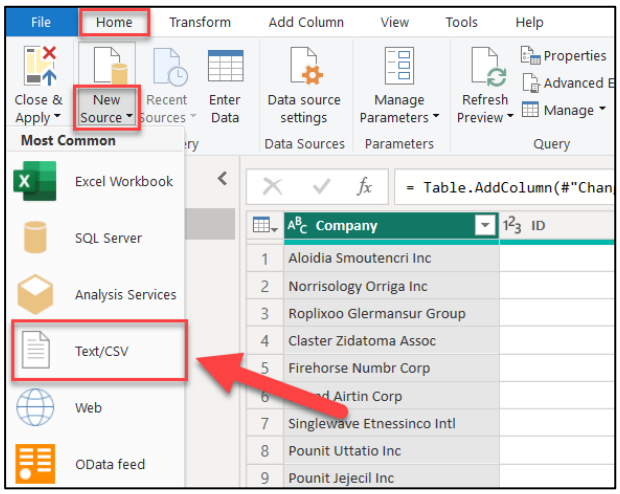
Task 2: New Source – Add a Dates table

In this task, you will add a Dates table to the existing Queries and Load the new query and table to the Data Model.

21. Ensure that the **Customers** query is selected from the Queries pane to the left of the screen.

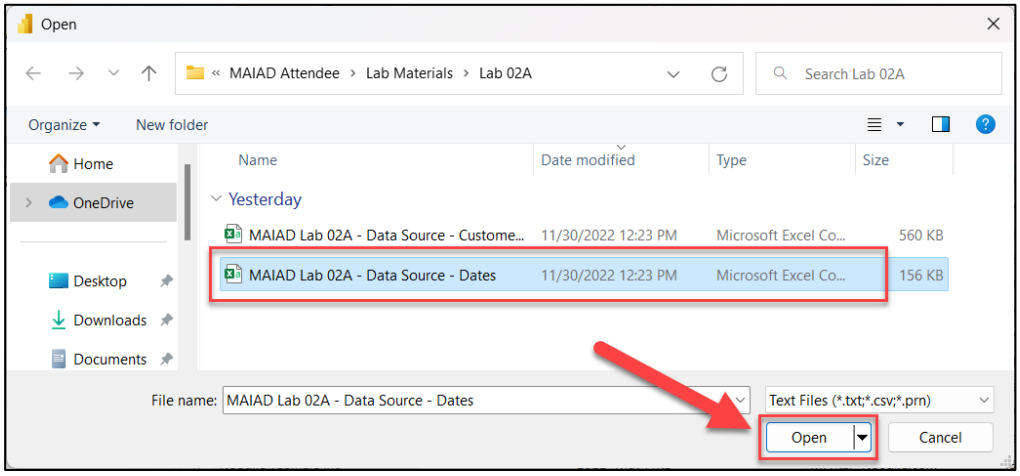
22. From the Power Query Editor **Home** tab in the ribbon, select **New Source**.

23. Select the **Text/CSV** option from the drop-down menu.



24. Navigate to the **<CourseFolder>\MAIAD Attendee\Lab Materials\Lab 02A** folder.

25. Select the file **MAIAD Lab 02A - Data Source – Dates.csv** and choose **Open**.



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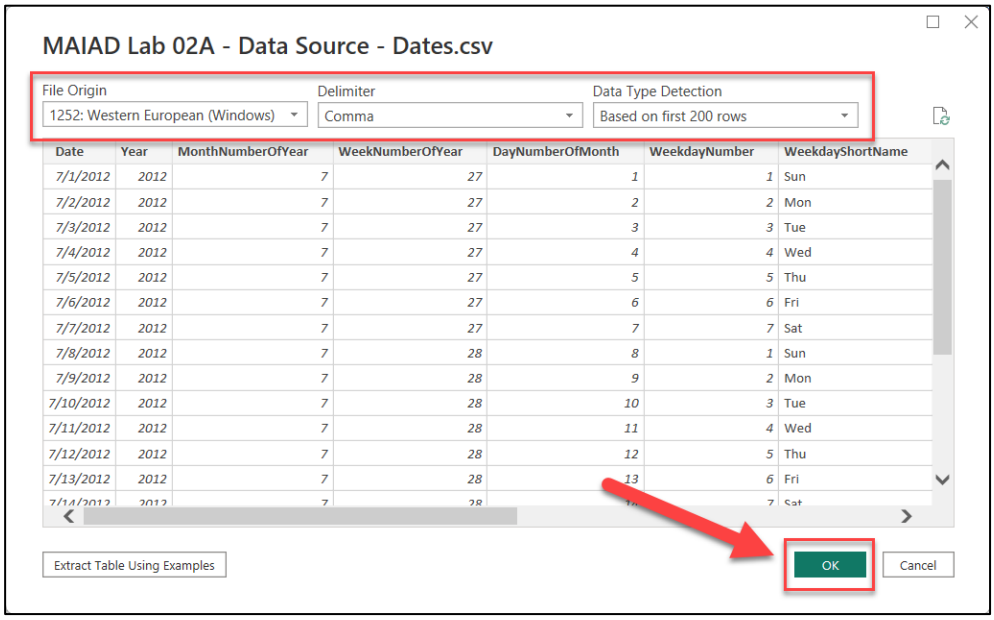
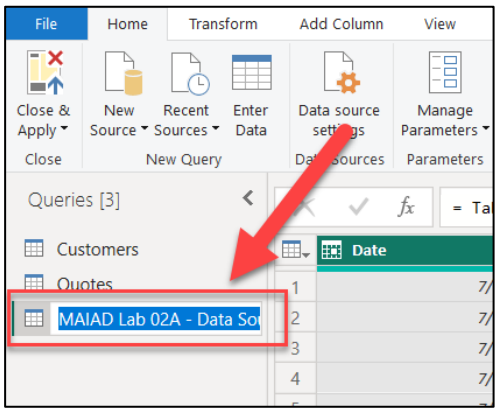
Leave the default **File Origin**, **Delimiter**, and **Data Type Detection** options. Then, select **OK**.



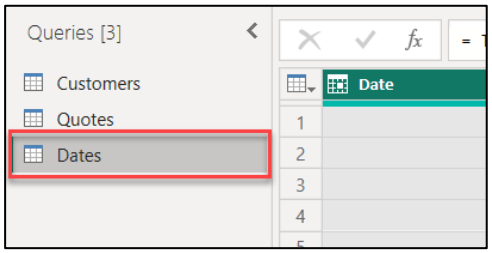
Task 3: Rename Query

In this task, you will add a rename the Query to use a user-friendly noun name versus the default file name.

26. Double left-click on the **MAIAD Lab 02A – Data Source – Dates** query, from the **Queries** pane to the left of the screen, to change the default Query name.



27. **Rename** the query to **Dates**.



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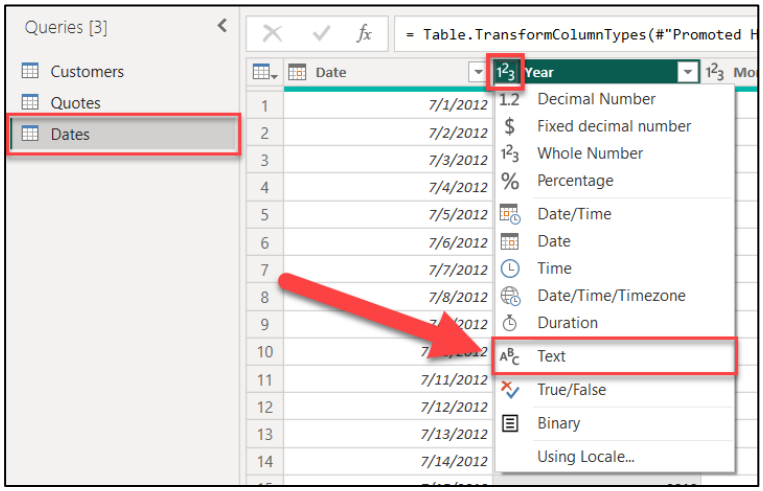
Task 4: Perform a Data Type Transformation

In this task, you will add a change to the default data type for the Year column of the #"Dates" query.

28. Ensure that the **Dates** query is selected within the Queries pane to the left of the screen.

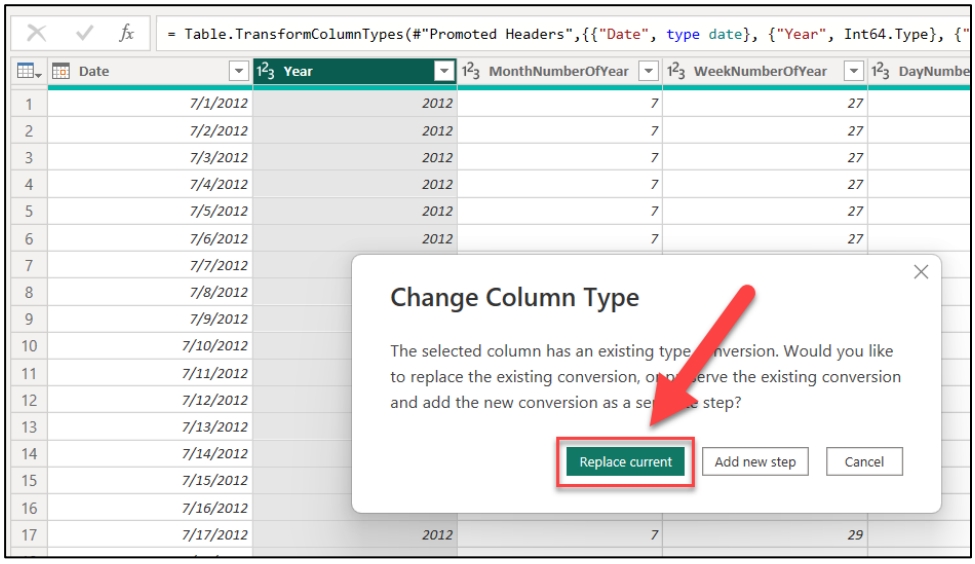
29. In the query preview grid area, select the **123** data type icon of the **Year** column, and change the data type to **Text**.

> **Note:** Column data types drive different functionality in Power BI – for example, a Whole Number will default to aggregate. It would not make sense that we would ever SUM the Year column, so by changing to a Text data type, we prevent this default aggregation in Power BI.



30. Select the **Replace current** button from the **Change Column Type** dialog window.

> **Note:** Since we are on the Change Type in the Applied Steps, this message confirms that we want to change the Year column to the Text data type in this existing step. The Add new step would change the Year column to the Text data type but add as a NEW step in the Applied Steps.



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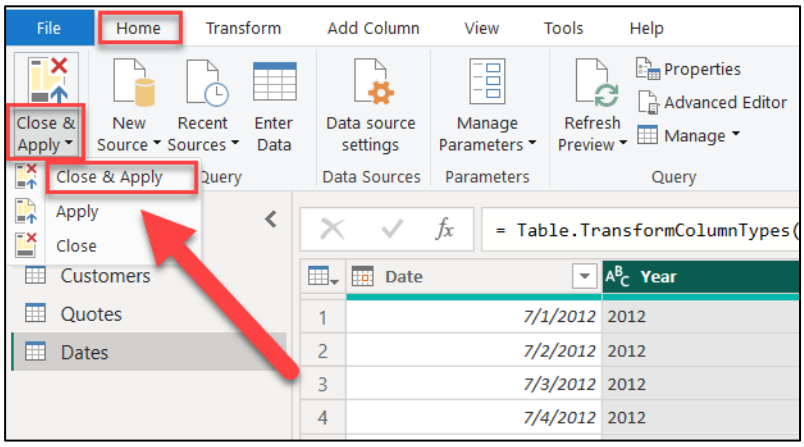
Exercise 3: Close Power Query & Load Dates table to the Data Model

In this exercise, you will Close & Apply the Power Query Editor changes and Load the Dates table to the Data Model.

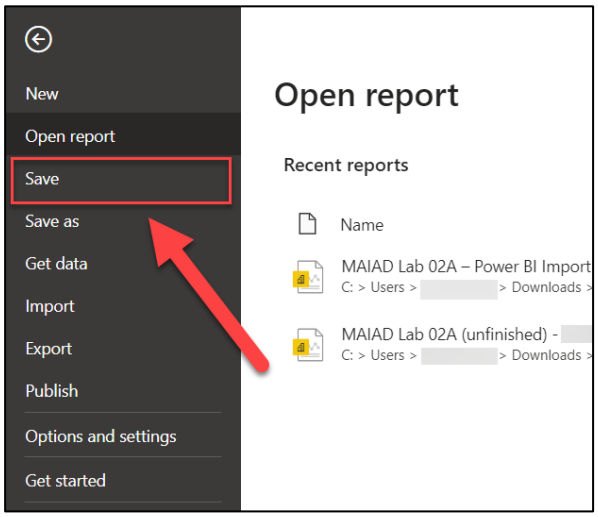
Task 1: Close & Apply

In this task, you will use the Close & Apply button to save the Dates query in the Power Query Editor and Load the Dates table to the Data Model.

31. From the **Home** tab in the ribbon, select the drop-down for **Close & Apply**, then select **Close & Apply**. This will load the new Dates table to the Data Model.



32. Lastly, select the **File** tab from the ribbon at the top of the screen. Then, select **Save**. This will save all the work that you have completed and any changes that have been made.



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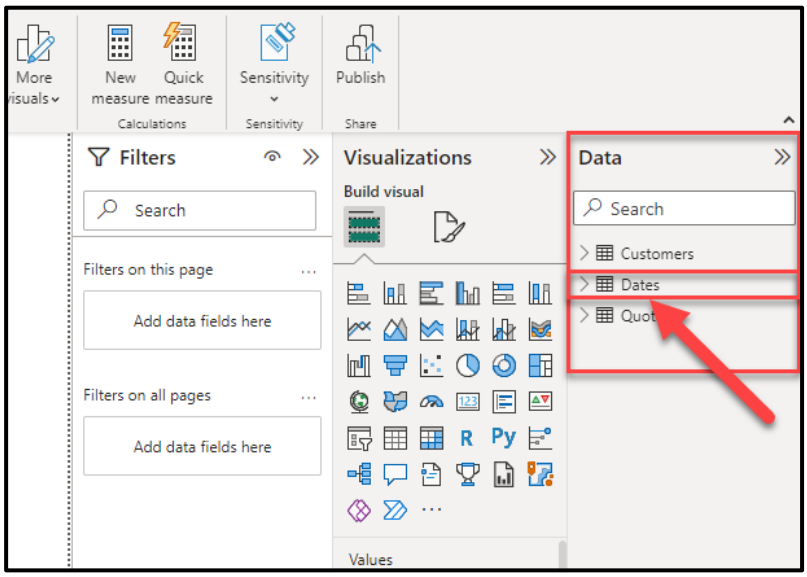
Task 2: View the Dates table in the Fields list

In this task, you will observe that the new Dates table is now also available in the Data pane.

33. From the **Data** pane, notice the new **Dates** table is now available.



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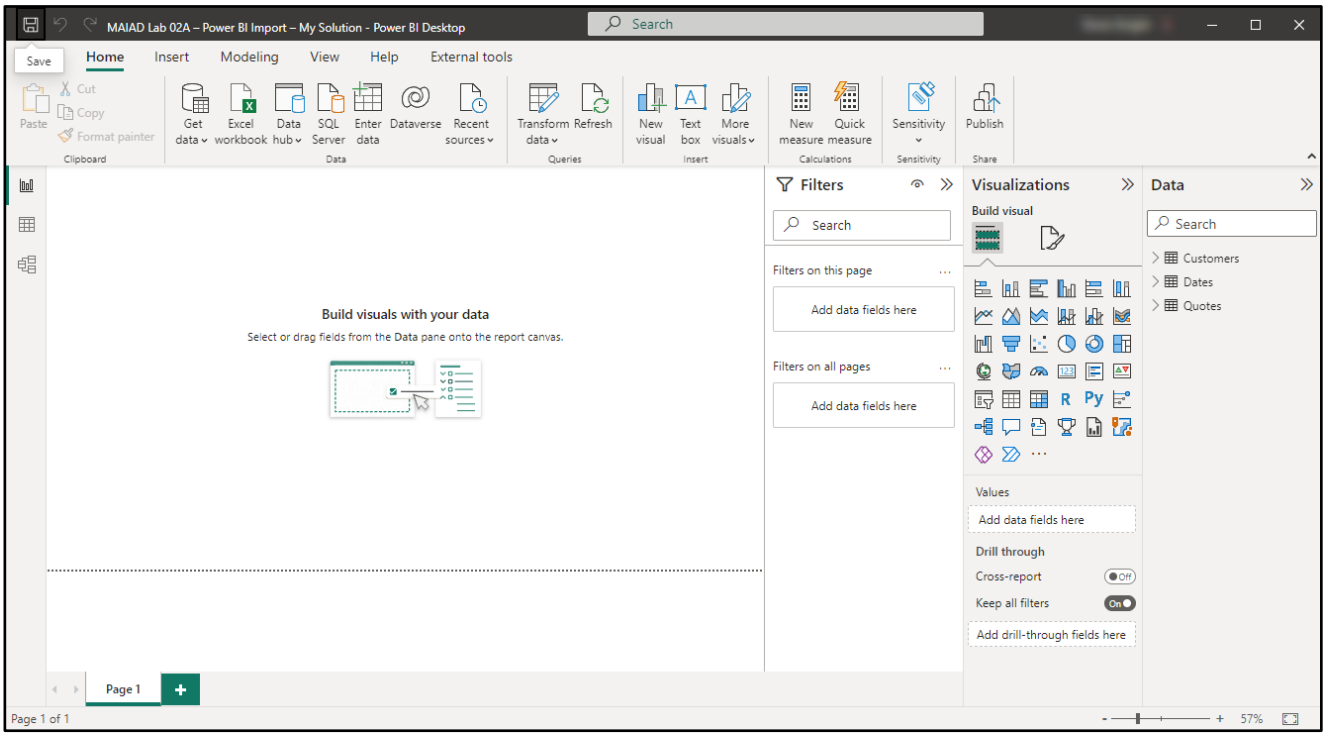
Summary

In this lab, you started with an existing Excel file that contained Power Query data connections to an Excel and CSV file from the previous Lab. You launched the Power BI Desktop application and imported the existing Power Connections from Excel to Power BI Desktop and saved them as a PBIX file. Then, you used the Transform data button to launch the Power Query Editor, from within Power BI Desktop, to load a new Dates query from a CSV data source and used the Preview area to perform a data type transformation of the Year column. Lastly, you used the Closed & Apply option to add the Dates query as a new table to the Data Model.



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