# Lab: Shaping and Combining Data

## Exercise 1: Shape Power BI Data

**Exercise Scenario**

You are exploring how Power BI can help shape and combine data that comes from multiple sources. Currently, much of the data is exported from SQL Server into Excel. You have been given two worksheets, one for sample sales data for the North America territory, and one for the European territory. After importing the data into Power BI, you will shape the data using transformations and formatting.

Task 1: Import Data from Excel

1.      Open **Power BI Desktop**.

2.      Import the **Sales - Europe.xlsx** file.

3.      In the **Navigator** window, select **Europe**, and click **Load**.

4.      Import the **Sales - North America.xlsx** file.

5.      In the **Navigator** window, select **North America**, and click **Edit**, to open the Query Editor.

Task 2: Apply Formatting to the Existing Data

1.      In the **Queries** pane, click **Europe** to display the data in preview mode.

2.      Remove the **ProductKey** column.

3.      Remove the **SalesOrderNumber** column.

4.      Rename the **SalesTerritoryCountry** column to **Country**.

5.      Rename the **SalesTerritoryGroup** column to **Sales Territory**.

6.      Rename the **EnglishProductCategoryName** to **Main Category**.

7.      Rename the **EnglishProductSubcategoryName** column to **Sub Category**.

8.      Rename **EnglishProductName** to **Product**.

9.      Move the **Color** column to the left.

10.    In the **Queries** pane, click **North America**.

11.    Remove the **ProductKey** column.

12.    Remove the **SalesOrderNumber** column.

13.    Rename the **SalesTerritoryCountry** column to **Country**.

14.    Rename the **SalesTerritoryGroup** column to **Sales Territory**.

15.    Rename the **EnglishProductCategoryName** to **Main Category**.

16.    Rename the **EnglishProductSubcategoryName** column to **Sub Category**.

17.    Rename **EnglishProductName** to **Product**.

18.    Move the **Color** column to the left.

19.    Open **Advanced Editor** to view the query that has been updated with the applied steps.

## Exercise 2: Combine Power BI Data

**Exercise Scenario**

You have imported the two worksheets for sales in Europe and North America, and applied some shaping. You now want to combine the rows from the North America query, into the Europe query. You also want to include a Country Code column.

Task 1: Add Related Data to the Shaped Data

1.      Select **Europe** in the **Queries** pane.

2.      Click **Append Queries**, and combine the North America data with the Europe data.

3.      Use the selection menu on the Country column header to check that the data has loaded.

4.      Import the **Country Codes.xlsx** file.

5.      In the **Navigator** window, select **Country Codes**, and click **Load**.

6.      Merge the **Country Codes** table with the **Europe** table.

7.      Exclude the **Territory** and **Country** columns, and clear the **Use original column name as prefix** setting.

8.      Move the **Code** column to the beginning of the table.

9.      Rename the **Code** column as **Country Code**.

10.    Apply the changes.