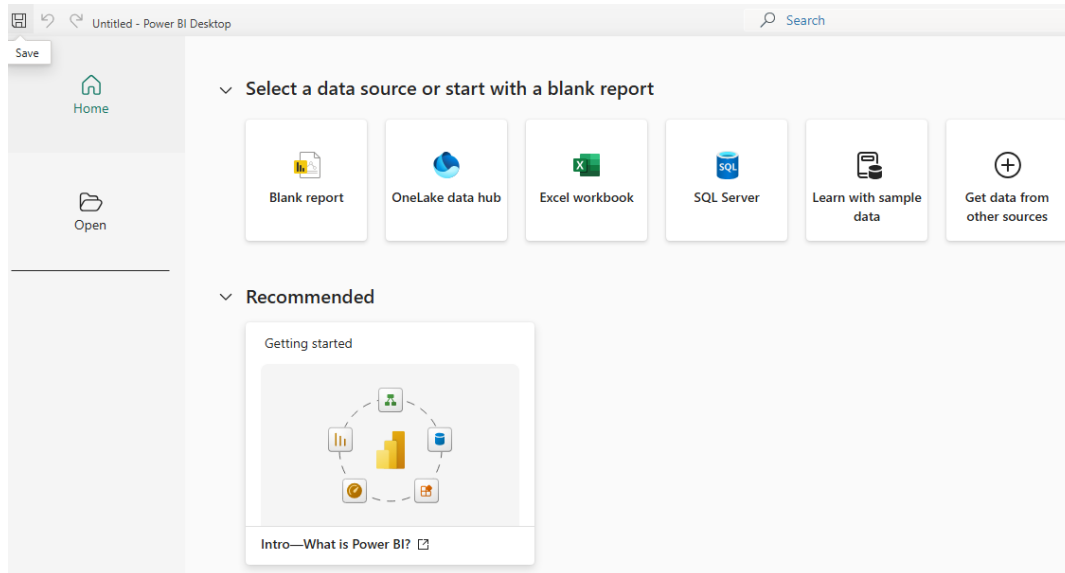


## Module 3 – Assignment

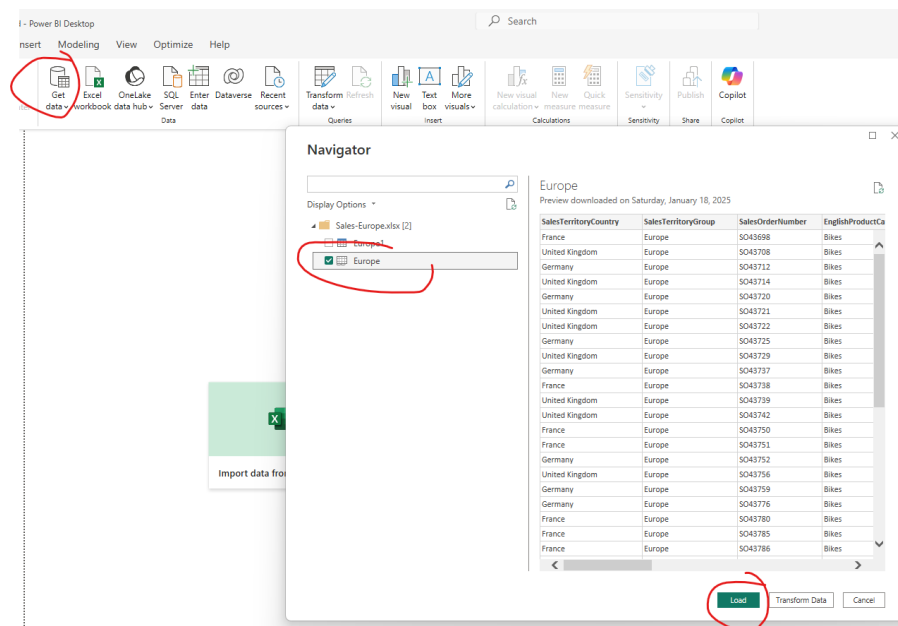
### Tasks To Be Performed:

#### Importing Data from Excel:

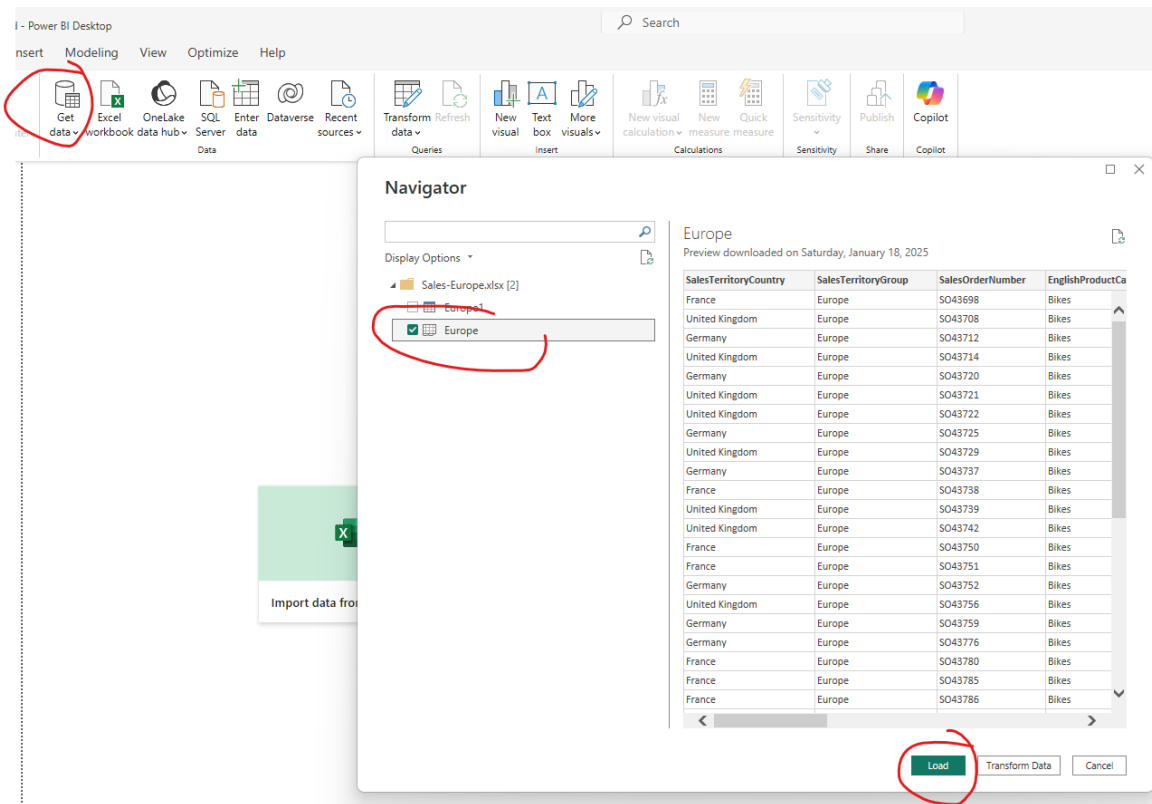
a) Open Power BI Desktop.



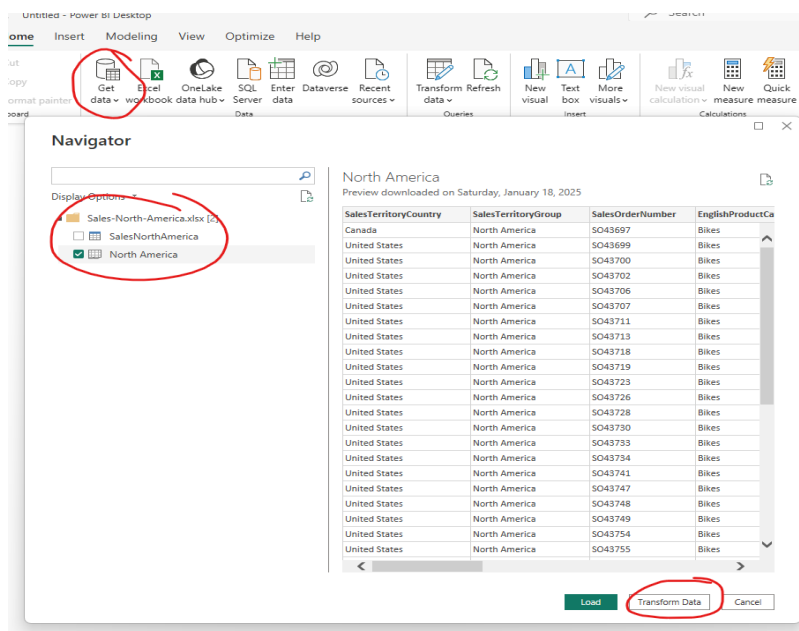
b) Import the sales-Europe Excel file.



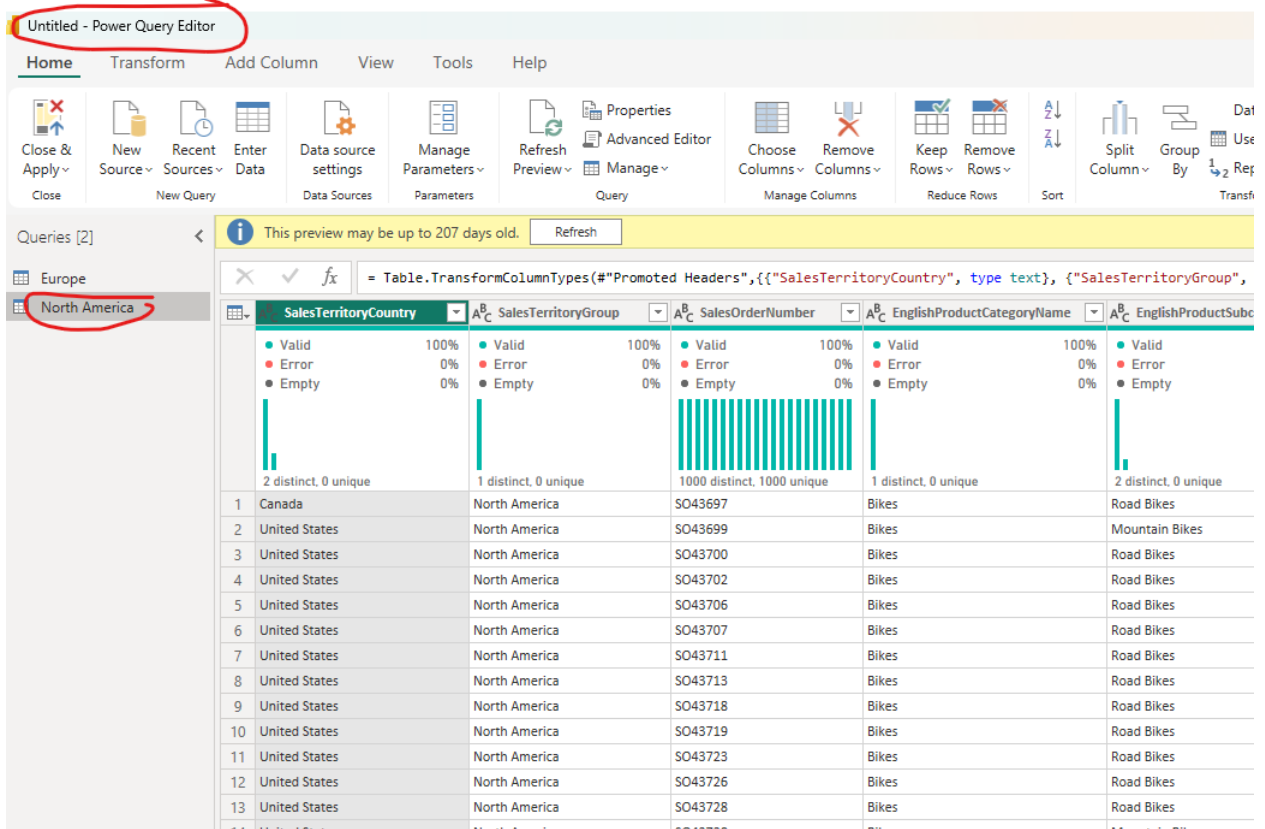
c) In the Navigator window, select Europe, and click on Load.



d) Import the sales-North America Excel file.

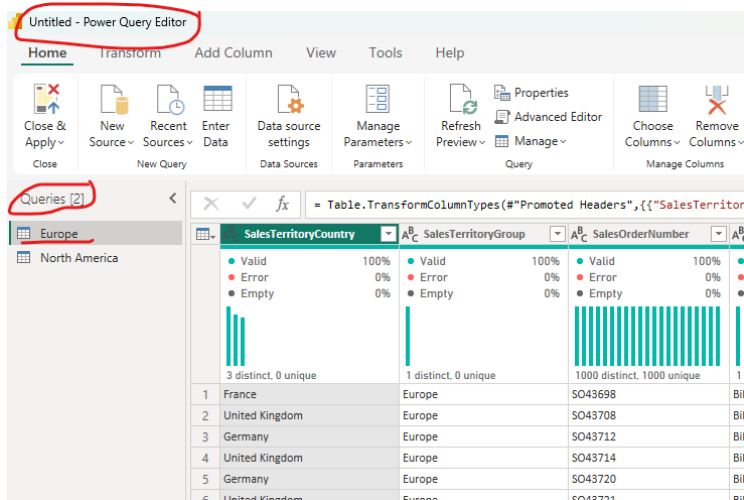


e) In the Navigator window, select North America, and click on Transform Data to open in Power Query Editor.

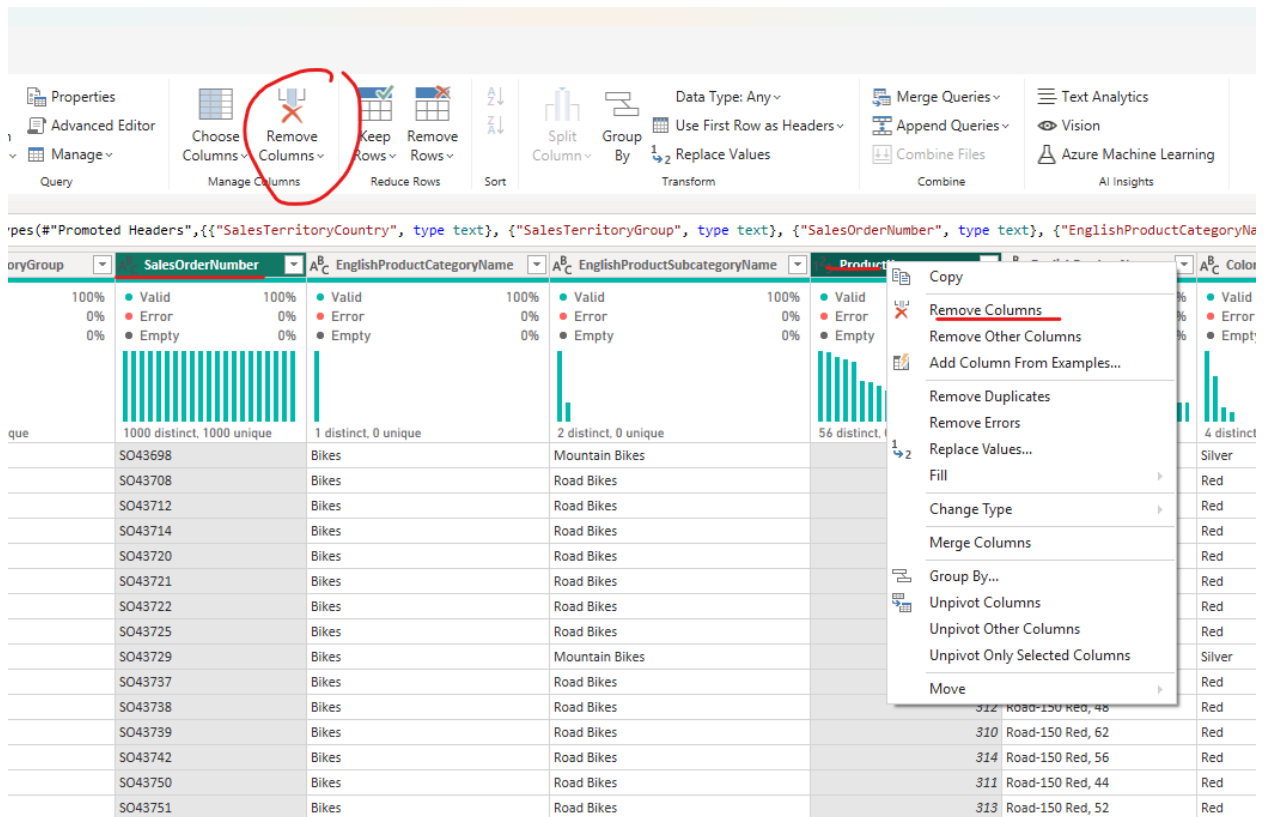


## Shaping and Combining Data:

a) In the Queries pane, click on Europe to display the data in the preview mode.



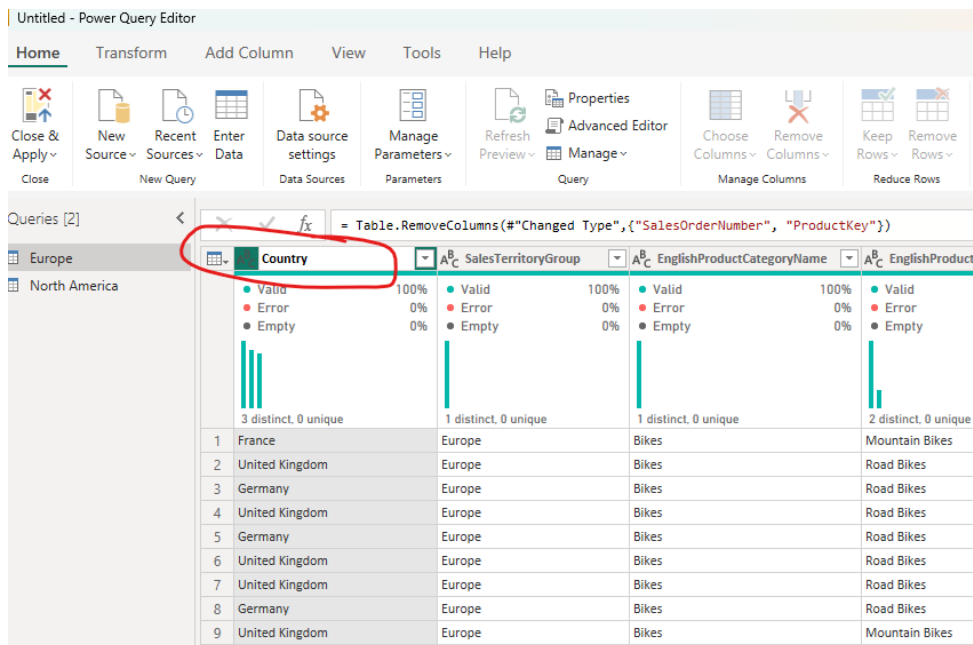
b) Remove ProductKey and SalesOrderNumber columns.



The screenshot shows the Power Query Editor interface. The 'Remove Columns' option in the 'Manage' tab is circled in red. A context menu is open over the 'SalesOrderNumber' column, showing various options including 'Remove Columns', 'Remove Other Columns', 'Add Column From Examples...', 'Remove Duplicates', 'Remove Errors', 'Replace Values...', 'Change Type', 'Merge Columns', 'Group By...', 'Unpivot Columns', 'Unpivot Other Columns', 'Unpivot Only Selected Columns', and 'Move'.

Query	SalesOrderNumber	EnglishProductCategoryName	EnglishProductSubcategoryName	Product	Color
1000 distinct, 1000 unique	1 distinct, 0 unique	2 distinct, 0 unique	56 distinct, 1 unique	4 distinct, 0 unique	
SO43698	Bikes	Mountain Bikes			
SO43708	Bikes	Road Bikes			
SO43712	Bikes	Road Bikes			
SO43714	Bikes	Road Bikes			
SO43720	Bikes	Road Bikes			
SO43721	Bikes	Road Bikes			
SO43722	Bikes	Road Bikes			
SO43725	Bikes	Road Bikes			
SO43729	Bikes	Mountain Bikes			
SO43737	Bikes	Road Bikes			
SO43738	Bikes	Road Bikes			
SO43739	Bikes	Road Bikes			
SO43742	Bikes	Road Bikes			
SO43750	Bikes	Road Bikes			
SO43751	Bikes	Road Bikes			

c) Rename the SalesTerritoryCountry column to Country.



The screenshot shows the Power Query Editor interface. The 'Country' column is highlighted in red. The formula bar shows the transformation: `Table.RemoveColumns(#'Changed Type',{\"SalesOrderNumber\", \"ProductKey\"})`.

Country	SalesTerritoryGroup	EnglishProductCategoryName	EnglishProductSubcategoryName
3 distinct, 0 unique	1 distinct, 0 unique	1 distinct, 0 unique	2 distinct, 0 unique
1 France	Europe	Bikes	Mountain Bikes
2 United Kingdom	Europe	Bikes	Road Bikes
3 Germany	Europe	Bikes	Road Bikes
4 United Kingdom	Europe	Bikes	Road Bikes
5 Germany	Europe	Bikes	Road Bikes
6 United Kingdom	Europe	Bikes	Road Bikes
7 United Kingdom	Europe	Bikes	Road Bikes
8 Germany	Europe	Bikes	Road Bikes
9 United Kingdom	Europe	Bikes	Mountain Bikes

d) Rename the SalesTerritoryGroup column to Sales Territory.

The screenshot shows the Microsoft Power Query Editor interface. The ribbon at the top includes 'Transform', 'Add Column', 'View', 'Tools', and 'Help'. The 'Transform' tab is active, showing options like 'New Query', 'Recent Sources', 'Enter Data', 'Data source settings', 'Manage Parameters', 'Refresh Preview', 'Properties', 'Advanced Editor', 'Manage', 'Choose Columns', and 'Remove Columns'. The main area displays a table with columns 'Country' and 'Sales Territory'. The 'Sales Territory' column is highlighted, and a context menu is open over it. The menu includes options like 'Copy', 'Remove', 'Duplicate Column', 'Add Column From Examples...', 'Remove Duplicates', 'Remove Errors', 'Change Type', 'Transform', 'Replace Values...', 'Replace Errors...', 'Split Column', 'Group By...', 'Fill', 'Unpivot Columns', 'Unpivot Other Columns', 'Unpivot Only Selected Columns', 'Rename...', 'Move', 'Drill Down', and 'Add as New Query'. The 'Rename...' option is circled in red. A red handwritten note 'Double Click' is written over the 'Country' column header. The formula bar at the top shows the query formula: `= Table.RenameColumns(#"Removed Columns",{{"SalesTerritoryCountry", "Sales Territory"}}`.

	Country	Sales Territory
1	France	Europe
2	United Kingdom	Europe
3	Germany	Europe
4	United Kingdom	Europe
5	Germany	Europe
6	United Kingdom	Europe
7	United Kingdom	Europe
8	Germany	Europe
9	United Kingdom	Europe
10	Germany	Europe
11	France	Europe
12	United Kingdom	Europe
13	United Kingdom	Europe
14	France	Europe
15	France	Europe
16	Germany	Europe
17	United Kingdom	Europe
18	Germany	Europe

e) Rename the EnglishProductCategoryName to Main Category.

sources Data settings Parameters Preview Manage Columns Columns Rows Rows Column By 1 2 Replace Values Transform

Query Data Sources Parameters Query Manage Columns Reduce Rows Sort

fx = Table.RenameColumns(#"Removed Columns",{"EnglishProductCategoryName", "Main Category"}, {"SalesTerritoryGroup", "Sales T

Country	Sales Territory	Main Category	EnglishProductSubcategoryName	EnglishProductName	Color
1 France	Europe	Bikes	Mountain Bikes	Mountain-100 Silver, 44	Silver
2 United Kingdom	Europe	Bikes	Road Bikes	Road-650 Red, 52	Red
3 Germany	Europe	Bikes	Road Bikes	Road-150 Red, 44	Red

f) Rename the EnglishProductSubcategoryName column to Sub Category.

Data Sources Parameters Query Manage Columns Reduce Rows Sort

fx = Table.RenameColumns(#"Removed Columns",{"EnglishProductCategoryName", "Main Category"}, {"Sales

Country	Sales Territory	Main Category	Sub Category	EnglishProduct
1 France	Europe	Bikes	Mountain Bikes	Mountain-100 Silver
2 United Kingdom	Europe	Bikes	Road Bikes	Road-650 Red, 52
3 Germany	Europe	Bikes	Road Bikes	Road-150 Red, 44
4 United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 44
5 Germany	Europe	Bikes	Road Bikes	Road-150 Red, 44
6 United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62
7 United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 48
8 Germany	Europe	Bikes	Road Bikes	Road-150 Red, 44
9 United Kingdom	Europe	Bikes	Mountain Bikes	Mountain-100 Silver
10 Germany	Europe	Bikes	Road Bikes	Road-150 Red, 44

Main Category  
1 (< 1%) Distinct | 0 (0%) Unique  
Remove Duplicates

g) Rename EnglishProductName to Product.

Data SourcesParametersQueryManage ColumnsReduce RowsSortTr

fx

= Table.RenameColumns("#Removed Columns",{"EnglishProductCategoryName", "Main Category"}, {"SalesTerritoryGr

	Country	Sales Territory	Main Category	Sub Category	Product	
	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>3 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>1 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>1 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>2 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>44 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>4</div></div>
1	France	Europe	Bikes	Mountain Bikes	Mountain-100 Silver, 44	Si
2	United Kingdom	Europe	Bikes	Road Bikes	Road-650 Red, 52	Rd
3	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 44	Rd
4	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 44	Rd
5	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 44	Rd
6	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	Rd
7	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 48	Rd
8	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 44	Rd

h) Move the color column to the left.

New SourceRecent SourcesEnter DataData source settingsManage ParametersRefresh PreviewManageChoose ColumnsRemove ColumnsKeep RowsRemove RowsSplit ColumnGroupByReplace ValuesTransform

fx

= Table.RenameColumns("#Removed Columns",{"EnglishProductCategoryName", "Main Category"}, {"SalesTerritoryGroup", "Sales Territory"

	Color	Sales Territory	Main Category	Sub Category	Product	Color
	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>3 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>1 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>1 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>2 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>44 distinct, 0 unique</div></div>	<div><div><div>Valid100%</div><div>Error0%</div><div>Empty0%</div></div><div></div><div>4 distinct, 0 unique</div></div>
1	France	Europe	Bikes	Mountain Bikes	Mountain-100 Silver, 44	Silver
2	United Kingdom	Europe	Bikes	Road Bikes	Road-650 Red, 52	Red
3	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 44	Red
4	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 44	Red
5	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 44	Red
6	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	Red
7	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 48	Red
8	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 44	Red
9	United Kingdom	Europe	Bikes	Mountain Bikes	Mountain-100 Silver, 44	Silver
10	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 44	Red
11	France	Europe	Bikes	Road Bikes	Road-150 Red, 48	Red
12	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	Red
13	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 56	Red
14	France	Europe	Bikes	Road Bikes	Road-150 Red, 44	Red

i) In the Queries pane, click on North America.

Untitled - Power Query Editor

Home Transform Add Column View Tools Help

Close & Apply New Source Recent Sources Enter Data Data source settings Manage Parameters Refresh Preview Properties Advanced Editor Choose Columns Remove Columns

Queries [2]

Europe

North America

Table.TransformColumnTypes(#\"Promoted Headers\",{{\"SalesTerritoryCountry\", type text}, {\"SalesTerritoryGroup\", type text}, {\"SalesOrderNumber\", type text}})

	SalesTerritoryCountry	SalesTerritoryGroup	SalesOrderNumber
1	Canada	North America	SO43697
2	United States	North America	SO43699
3	United States	North America	SO43700
4	United States	North America	SO43702
5	United States	North America	SO43706

j) Repeat Steps from 2 to 8.

Table.ReorderColumns(Table.PromotedColumns, {\"Color\", \"Country\", \"SalesTerritory\", \"Main Category\", \"Sub category\", \"Product\", \"OrderQuantity\", \"UnitPrice\", \"OrderDate\", \"DueDate\", \"ShipDate\"})

Query Settings

PROPERTIES

Name: North America

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type

Removed Columns

Renamed Columns

Reordered Columns

	Color	Country	SalesTerritory	Main Category	Sub category	Product	OrderQuantity	UnitPrice	OrderDate	DueDate	ShipDate
1	Red	Canada	North America	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	7/1/2		
2	Silver	United States	North America	Bikes	Mountain Bikes	Mountain-100 Silver, 44	1	3399.99	7/1/2		
3	Black	United States	North America	Bikes	Road Bikes	Road-650 Black, 62	1	699.0982	7/2/2		
4	Red	United States	North America	Bikes	Road Bikes	Road-150 Red, 44	1	3578.27	7/2/2		
5	Red	United States	North America	Bikes	Road Bikes	Road-150 Red, 48	1	3578.27	7/3/2		
6	Red	United States	North America	Bikes	Road Bikes	Road-150 Red, 48	1	3578.27	7/3/2		
7	Red	United States	North America	Bikes	Road Bikes	Road-150 Red, 56	1	3578.27	7/4/2		
8	Red	United States	North America	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	7/5/2		
9	Red	United States	North America	Bikes	Road Bikes	Road-150 Red, 44	1	3578.27	7/6/2		
10	Red	United States	North America	Bikes	Road Bikes	Road-150 Red, 48	1	3578.27	7/6/2		
11	Black	United States	North America	Bikes	Road Bikes	Road-650 Black, 58	1	699.0982	7/7/2		

k) Append Europe and North America tables.

Append

Concatenate rows from two tables into a single table.

☒ Two tables ☐ Three or more tables

First table: Europe

Second table: North America

OK

l) Import the country code.xlsx.

Country Codes

Preview downloaded on Saturday, January 18, 2025

Column1	Column2	Column3
Territory	Country	Code
North America	Canada	CA
Europe	France	FR
Europe	Germany	DE
Europe	Italy	IT
Europe	Spain	SP
Europe	Switzerland	SZ
Europe	United Kingdom	UK
North America	United States	US

OK

m) Merge the country code query with Europe.

The screenshot shows the Power Query Editor interface. The ribbon at the top includes 'Data source settings', 'Parameters', 'Query', 'Manage Columns', 'Reduce Rows', 'Sort', 'Transform', and 'Combine'. The 'Merge Queries' button in the 'Combine' group is circled in red. Below the ribbon, the formula bar shows the query name and its definition. The main area displays a table with columns 'Territory', 'Country', and 'Code'. The 'Territory' column has a dropdown menu with 'Europe' selected. The 'Country' column has a dropdown menu with 'France' selected. The 'Code' column has a dropdown menu with 'CA' selected. The 'Merge' dialog box is open, showing the 'Country Codes' table and the 'Europe' table. The 'Join Kind' is set to 'Left Outer (all from first, matching from second)'. The 'Fuzzy matching options' section is expanded, showing a checkmark for 'Use fuzzy matching to perform the merge'. The 'OK' button is highlighted.

Table: TransformColumnTypes(#"Promoted Headers", {"Territory": type text, "Country": type text, "Code": type text})

Territory	Country	Code
North America	Canada	CA
Europe	France	FR
Europe	Germany	DE
Europe	Italy	IT
Europe	Spain	SP
Europe	Switzerland	SZ
Europe	United Kingdom	UK
North America	United States	US

Country Codes

Territory	Country	Code
North America	Canada	CA
Europe	France	FR
Europe	Germany	DE
Europe	Italy	IT
Europe	Spain	SP

Europe

Color	Country	Sales Territory	Main Category	Sub Category	Product	OrderQuantity
Silver	France	Europe	Bikes	Mountain Bikes	Mountain-100 Silver, 44	
Red	United Kingdom	Europe	Bikes	Road Bikes	Road-650 Red, 52	
Red	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 44	
Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 44	

Join Kind: Left Outer (all from first, matching from second)

Use fuzzy matching to perform the merge

Fuzzy matching options

The selection matches 3 of 8 rows from the first table.

OK Cancel

n) Get the country code from the merged column, and move it to the beginning of the table.

Untitled - Power Query Editor

Home Transform Add Column View Tools Help

Close & Apply, New Source, Recent Sources, Enter Data, Data source settings, Manage Parameters, Refresh Preview, Properties, Advanced Editor, Choose Columns, Remove Columns, Keep Rows, Remove Rows, Sort, Split Column, Group By, Data Type: Text, Use First Row as Headers, Replace Values, Merge Queries, Append Queries, Combine Files, Combine

Queries [5]

- Europe
- North America
- Append1
- Country Codes
- Merge1**

fx = Table.ReorderColumns(#"Expanded Europe",{"Country", "Code", "Territory", "Europe.Color", "Europe.Country", "Europe.Sales Territory", "Europe.Main Category",

	Country	Code	Territory	Europe.Color	Europe.Country	Europe.Sales Territory	Europe.Main Category
1	France	FR	Europe	Silver	France	Europe	Bikes
2	United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes
3	United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes
4	United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes
5	United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes
6	United Kingdom	UK	Europe	Silver	United Kingdom	Europe	Bikes
7	Germany	DE	Europe	Red	Germany	Europe	Bikes
8	Germany	DE	Europe	Red	Germany	Europe	Bikes
9	Germany	DE	Europe	Red	Germany	Europe	Bikes
10	Germany	DE	Europe	Red	Germany	Europe	Bikes
11	France	FR	Europe	Red	France	Europe	Bikes
12	United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes
13	United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes
14	France	FR	Europe	Red	France	Europe	Bikes
15	France	FR	Europe	Red	France	Europe	Bikes
16	Germany	DE	Europe	Red	Germany	Europe	Bikes

o) Rename the Code column to Country Code.

fx = Table.RenameColumns(#"Reordered Columns",{"Code", "Country Code"})

	Country	Country Code	Territory	Europe.Color	Europe.Country	Europe.Sales Territory
1	France	FR	Europe	Silver	France	Europe
2	United Kingdom	UK	Europe	Red	United Kingdom	Europe
3	United Kingdom	UK	Europe	Red	United Kingdom	Europe
4	United Kingdom	UK	Europe	Red	United Kingdom	Europe
5	United Kingdom	UK	Europe	Red	United Kingdom	Europe
6	United Kingdom	UK	Europe	Silver	United Kingdom	Europe
7	Germany	DE	Europe	Red	Germany	Europe
8	Germany	DE	Europe	Red	Germany	Europe
9	Germany	DE	Europe	Red	Germany	Europe
10	Germany	DE	Europe	Red	Germany	Europe
11	France	FR	Europe	Red	France	Europe
12	United Kingdom	UK	Europe	Red	United Kingdom	Europe
13	United Kingdom	UK	Europe	Red	United Kingdom	Europe
14	France	FR	Europe	Red	France	Europe
15	France	FR	Europe	Red	France	Europe
16	Germany	DE	Europe	Red	Germany	Europe
17	United Kingdom	UK	Europe	Black	United Kingdom	Europe
18	Germany	DE	Europe	Red	Germany	Europe
19	Germany	DE	Europe	Red	Germany	Europe
20	France	FR	Europe	Red	France	Europe
21	France	FR	Europe	Red	France	Europe
22	France	FR	Europe	Red	France	Europe

p) Save the file as Shaping and Combining Data.

Shaping and Combining Data • Last saved: Today at 2:05 PM

FileHomeHelpTable tools

Name Merge1

Structure

Mark as date table  
Calendars

Manage relationships  
Relationships

New measure  
measure

Quick measure column  
Calculations

New table

New table

Country	Country Code	Territory	Europe.Color	Europe.Country	Europe.Sales Territory	Europe.Main Category	Europe.Sub Category	Europe.Product	Europe.OrderQuantity	Europe.UnitPrice	Europe.Ore
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Wedn
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Mon
Germany	DE	Europe	Red	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Satu
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Mon
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Fri
Germany	DE	Europe	Red	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Mon
France	FR	Europe	Red	France	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Tues
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Satur
Germany	DE	Europe	Red	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Satur
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Sund
Germany	DE	Europe	Red	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Mon
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Thurs
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Friday
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Sund
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Tues
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Thurs
Germany	DE	Europe	Red	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Tues
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Frid
Germany	DE	Europe	Red	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Sund
Germany	DE	Europe	Red	Germany	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Tues
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Tues
United Kingdom	UK	Europe	Red	United Kingdom	Europe	Bikes	Road Bikes	Road-150 Red, 62	1	3578.27	Tues

Data

Search

Append1

Country Codes

Europe

Merge1

North America