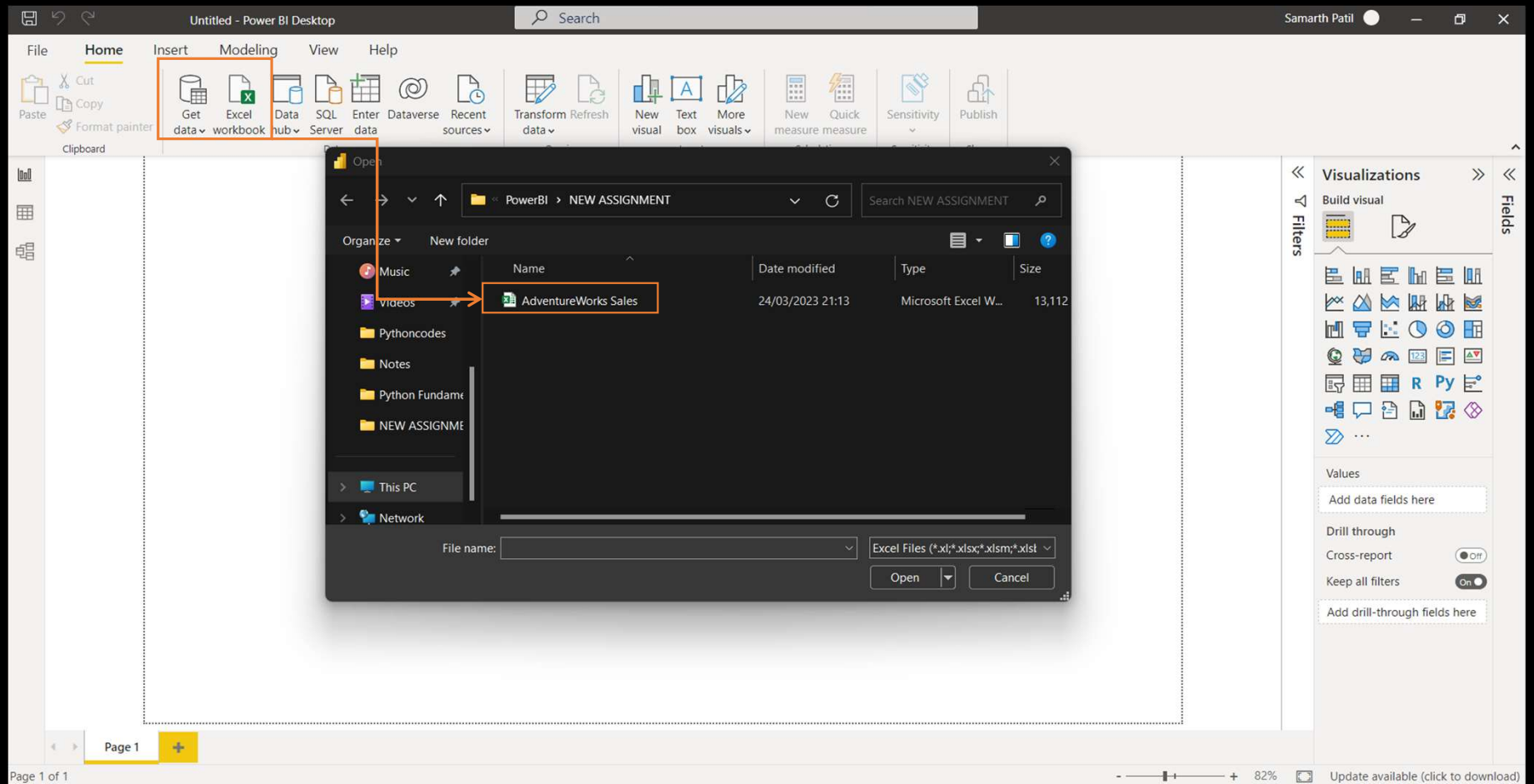


Assignment

1. Load Adventure Works data in Power BI Desktop



Loaded to Power BI Query Editor and
2.Checked data type of all columns and fixed all errors and transformed data.

The screenshot displays the Power Query Editor window with the following components:

- File Name:** Untitled - Power Query Editor
- Ribbon:** File, Home, Transform, Add Column, View, Tools, Help. The Transform ribbon is active, showing options like Data Type, Merge Queries, Append Queries, Combine Files, and AI Insights.
- Queries [7]:** A list of queries including Customer, Date, Product, Reseller, Sales, Sales Order, and Sales Territory. The 'Customer' query is selected.
- Table:** A table with 7 columns and 28 rows of data. The columns are: CustomerKey (123), Customer ID (A8C), Customer (A8C), City (A8C), State-Province (A8C), Country-Region (A8C), and Postal Code (123). The data includes names like Russell Xie, Savannah Baker, Maurice Tang, etc.
- Query Settings:** A pane on the right showing the query name 'Customer' and a list of applied steps: Source, Navigation, Promoted Headers, and Changed Type.
- Status Bar:** 7 COLUMNS, 999+ ROWS. Column profiling based on top 1000 rows.

| | CustomerKey | Customer ID | Customer | City | State-Province | Country-Region | Postal Code |
|----|-------------|-------------|-------------------|---------|----------------|----------------|-------------|
| 1 | 11024 | AW00011024 | Russell Xie | Concord | California | United States | |
| 2 | 11081 | AW00011081 | Savannah Baker | Concord | California | United States | |
| 3 | 11160 | AW00011160 | Maurice Tang | Concord | California | United States | |
| 4 | 11161 | AW00011161 | Emily Wood | Concord | California | United States | |
| 5 | 11184 | AW00011184 | Meghan Hernandez | Concord | California | United States | |
| 6 | 11295 | AW00011295 | Taylor Lewis | Concord | California | United States | |
| 7 | 11329 | AW00011329 | Andy Alvarez | Concord | California | United States | |
| 8 | 11499 | AW00011499 | Pedro Vance | Concord | California | United States | |
| 9 | 11539 | AW00011539 | Justin Washington | Concord | California | United States | |
| 10 | 11655 | AW00011655 | Tamara Sharma | Concord | California | United States | |
| 11 | 11733 | AW00011733 | Kristi Schmidt | Concord | California | United States | |
| 12 | 11851 | AW00011851 | Jada Mitchell | Concord | California | United States | |
| 13 | 11853 | AW00011853 | Grace Jones | Concord | California | United States | |
| 14 | 11945 | AW00011945 | Dennis Huang | Concord | California | United States | |
| 15 | 12146 | AW00012146 | Xavier Thomas | Concord | California | United States | |
| 16 | 12411 | AW00012411 | Kevin Alexander | Concord | California | United States | |
| 17 | 12429 | AW00012429 | Melvin Black | Concord | California | United States | |
| 18 | 13017 | AW00013017 | Xavier Alexander | Concord | California | United States | |
| 19 | 13060 | AW00013060 | Eugene Zhu | Concord | California | United States | |
| 20 | 13162 | AW00013162 | Nina Nath | Concord | California | United States | |
| 21 | 13167 | AW00013167 | Mario Tang | Concord | California | United States | |
| 22 | 13189 | AW00013189 | Gloria Romero | Concord | California | United States | |
| 23 | 13208 | AW00013208 | Cassidy Bryant | Concord | California | United States | |
| 24 | 13219 | AW00013219 | Rafael Shan | Concord | California | United States | |
| 25 | 13333 | AW00013333 | Tara Chander | Concord | California | United States | |
| 26 | 13360 | AW00013360 | Jada Cook | Concord | California | United States | |
| 27 | 13365 | AW00013365 | Luke Shan | Concord | California | United States | |
| 28 | | | | | | | |

3.Extract Month Name from date column

The screenshot shows the Power Query Editor interface. The ribbon is set to the 'Transform' tab, and the 'Extract' button under the 'Text Column' group is highlighted with an orange box. The formula bar displays the M code: `= Table.RenameColumns(#"Extracted Month Name",{{"Month", "Month Name"}})`. The data table has columns: 'ar', 'Fiscal Quarter', 'Month Name', 'Full Date', 'MonthKey', 'Month - Copy', and 'Month - Copy.1'. The 'Month Name' column is highlighted with an orange box and contains the word 'July' for all rows. The 'Query Settings' pane on the right shows the 'APPLIED STEPS' list, where 'Extracted Month Name' is highlighted with an orange box.

| ar | Fiscal Quarter | Month Name | Full Date | MonthKey | Month - Copy | Month - Copy.1 |
|----|----------------|------------|------------|----------|--------------|----------------|
| 1 | FY2020 Q1 | July | 01/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 2 | FY2020 Q1 | July | 02/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 3 | FY2020 Q1 | July | 03/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 4 | FY2020 Q1 | July | 04/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 5 | FY2020 Q1 | July | 05/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 6 | FY2020 Q1 | July | 06/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 7 | FY2020 Q1 | July | 07/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 8 | FY2020 Q1 | July | 08/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 9 | FY2020 Q1 | July | 09/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 10 | FY2020 Q1 | July | 10/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 11 | FY2020 Q1 | July | 11/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 12 | FY2020 Q1 | July | 12/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 13 | FY2020 Q1 | July | 13/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 14 | FY2020 Q1 | July | 14/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 15 | FY2020 Q1 | July | 15/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 16 | FY2020 Q1 | July | 16/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 17 | FY2020 Q1 | July | 17/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 18 | FY2020 Q1 | July | 18/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 19 | FY2020 Q1 | July | 19/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 20 | FY2020 Q1 | July | 20/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 21 | FY2020 Q1 | July | 21/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 22 | FY2020 Q1 | July | 22/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 23 | FY2020 Q1 | July | 23/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 24 | FY2020 Q1 | July | 24/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 25 | FY2020 Q1 | July | 25/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 26 | FY2020 Q1 | July | 26/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 27 | FY2020 Q1 | July | 27/07/2019 | 201907 | 01/07/2019 | 01/07/2019 |
| 28 | FY2020 Q1 | July | | | | |

9 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 21:11

Extract Month Number from date column

The screenshot displays the Power Query Editor interface. The main area shows a table with the following columns: Year, Fiscal Quarter, Month Name, Month Number, Full Date, MonthKey, and Month - Copy.1. The 'Month Number' column is highlighted with an orange box. The formula bar at the top shows the M code: `= Table.RenameColumns(#"Extracted Month",{{"Month - Copy", "Month Number"}})`. The right sidebar shows the 'APPLIED STEPS' list with 'Renamed Columns1' selected.

| | Year | Fiscal Quarter | Month Name | Month Number | Full Date | MonthKey | Month - Copy.1 |
|----|-----------|----------------|------------|--------------|-----------|----------|----------------|
| 1 | FY2020 Q1 | July | 7 | 01/07/2019 | 201907 | 01/0. | |
| 2 | FY2020 Q1 | July | 7 | 02/07/2019 | 201907 | 01/0. | |
| 3 | FY2020 Q1 | July | 7 | 03/07/2019 | 201907 | 01/0. | |
| 4 | FY2020 Q1 | July | 7 | 04/07/2019 | 201907 | 01/0. | |
| 5 | FY2020 Q1 | July | 7 | 05/07/2019 | 201907 | 01/0. | |
| 6 | FY2020 Q1 | July | 7 | 06/07/2019 | 201907 | 01/0. | |
| 7 | FY2020 Q1 | July | 7 | 07/07/2019 | 201907 | 01/0. | |
| 8 | FY2020 Q1 | July | 7 | 08/07/2019 | 201907 | 01/0. | |
| 9 | FY2020 Q1 | July | 7 | 09/07/2019 | 201907 | 01/0. | |
| 10 | FY2020 Q1 | July | 7 | 10/07/2019 | 201907 | 01/0. | |
| 11 | FY2020 Q1 | July | 7 | 11/07/2019 | 201907 | 01/0. | |
| 12 | FY2020 Q1 | July | 7 | 12/07/2019 | 201907 | 01/0. | |
| 13 | FY2020 Q1 | July | 7 | 13/07/2019 | 201907 | 01/0. | |
| 14 | FY2020 Q1 | July | 7 | 14/07/2019 | 201907 | 01/0. | |
| 15 | FY2020 Q1 | July | 7 | 15/07/2019 | 201907 | 01/0. | |
| 16 | FY2020 Q1 | July | 7 | 16/07/2019 | 201907 | 01/0. | |
| 17 | FY2020 Q1 | July | 7 | 17/07/2019 | 201907 | 01/0. | |
| 18 | FY2020 Q1 | July | 7 | 18/07/2019 | 201907 | 01/0. | |
| 19 | FY2020 Q1 | July | 7 | 19/07/2019 | 201907 | 01/0. | |
| 20 | FY2020 Q1 | July | 7 | 20/07/2019 | 201907 | 01/0. | |
| 21 | FY2020 Q1 | July | 7 | 21/07/2019 | 201907 | 01/0. | |
| 22 | FY2020 Q1 | July | 7 | 22/07/2019 | 201907 | 01/0. | |
| 23 | FY2020 Q1 | July | 7 | 23/07/2019 | 201907 | 01/0. | |
| 24 | FY2020 Q1 | July | 7 | 24/07/2019 | 201907 | 01/0. | |
| 25 | FY2020 Q1 | July | 7 | 25/07/2019 | 201907 | 01/0. | |
| 26 | FY2020 Q1 | July | 7 | 26/07/2019 | 201907 | 01/0. | |
| 27 | FY2020 Q1 | July | 7 | 27/07/2019 | 201907 | 01/0. | |
| 28 | | | | | | | |

9 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED AT 21:15

Extract Day Name from date column

The screenshot displays the Power Query Editor interface. The main area shows a data table with columns: Fiscal Year, Fiscal Quarter, Month Name, Month Number, Day Name, and Full Date. The 'Day Name' column is highlighted in yellow. The formula bar at the top shows the M code: `= Table.TransformColumns("#Renamed Columns2", {{ "Day Name", each Date.DayOfWeekName(_), type text }})`. The 'Extract' option in the 'Format' dropdown menu is highlighted with an orange box. The 'Query Settings' pane on the right shows the 'APPLIED STEPS' list, where 'Extracted Day Name' is highlighted with an orange box.

Queries [7]

- Customer
- Date
- Product
- Reseller
- Sales
- Sales Order
- Sales Territory

Table

| | Fiscal Year | Fiscal Quarter | Month Name | Month Number | Day Name | Full Date |
|----|-------------|----------------|------------|--------------|----------|------------|
| 1 | 01/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 01/07/2020 |
| 2 | 02/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 02/07/2020 |
| 3 | 03/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 03/07/2020 |
| 4 | 04/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 04/07/2020 |
| 5 | 05/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 05/07/2020 |
| 6 | 06/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 06/07/2020 |
| 7 | 07/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 07/07/2020 |
| 8 | 08/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 08/07/2020 |
| 9 | 09/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 09/07/2020 |
| 10 | 10/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 10/07/2020 |
| 11 | 11/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 11/07/2020 |
| 12 | 12/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 12/07/2020 |
| 13 | 13/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 13/07/2020 |
| 14 | 14/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 14/07/2020 |
| 15 | 15/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 15/07/2020 |
| 16 | 16/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 16/07/2020 |
| 17 | 17/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 17/07/2020 |
| 18 | 18/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 18/07/2020 |
| 19 | 19/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 19/07/2020 |
| 20 | 20/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 20/07/2020 |
| 21 | 21/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 21/07/2020 |
| 22 | 22/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 22/07/2020 |
| 23 | 23/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 23/07/2020 |
| 24 | 24/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 24/07/2020 |
| 25 | 25/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 25/07/2020 |
| 26 | 26/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 26/07/2020 |
| 27 | 27/07/2019 | FY2020 | FY2020 Q1 | July | 7 Monday | 27/07/2020 |
| 28 | | | | | | |

8 COLUMNS, 999+ ROWS Column profiling based on top 1000 rows

Query Settings

PROPERTIES

Name

Date

APPLIED STEPS

- Source
- Navigation
- Promoted Headers
- Changed Type
- Duplicated Column
- Duplicated Column1
- Extracted Month Name
- Renamed Columns
- Reordered Columns
- Extracted Month
- Renamed Columns1
- Reordered Columns1
- Removed Columns
- Renamed Columns2
- Extracted Day Name

PREVIEW DOWNLOADED AT 21:1

Extract Year from date column

The screenshot displays the Power Query Editor interface. The ribbon includes 'File', 'Home', 'Transform', 'Add Column', 'View', 'Tools', and 'Help'. The 'Transform' tab is active, showing options like 'Transpose', 'Reverse Rows', 'Detect Data Type', 'Rename', 'Pivot Column', 'Convert to List', 'Split Column', 'Format', 'Merge Columns', 'Statistics', 'Standard Scientific', 'Trigonometry', 'Rounding', 'Information', 'Date', 'Time', 'Duration', 'Run R script', and 'Run Python script'. The 'Extract' option under the 'Format' group is highlighted with an orange box.

The main area shows a table with the following columns: 'Date', 'Fiscal Year', 'Fiscal Quarter', 'Month Name', 'Month Number', 'Day Name', and 'Year'. The 'Year' column is highlighted in yellow. The formula bar at the top displays the transformation: `= Table.TransformColumns(#"Renamed Columns3",{{"Year", Date.Year, Int64.Type}})`.

The 'Query Settings' pane on the right shows the 'APPLIED STEPS' list, which includes 'Extracted Year' highlighted with an orange box. The status bar at the bottom indicates '3 COLUMNS, 999+ ROWS' and 'Column profiling based on top 1000 rows'.

| | Date | Fiscal Year | Fiscal Quarter | Month Name | Month Number | Day Name | Year |
|----|------------|-------------|----------------|------------|--------------|----------|------|
| 1 | 01/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 2 | 02/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 3 | 03/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 4 | 04/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 5 | 05/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 6 | 06/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 7 | 07/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 8 | 08/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 9 | 09/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 10 | 10/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 11 | 11/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 12 | 12/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 13 | 13/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 14 | 14/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 15 | 15/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 16 | 16/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 17 | 17/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 18 | 18/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 19 | 19/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 20 | 20/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 21 | 21/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 22 | 22/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 23 | 23/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 24 | 24/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 25 | 25/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 26 | 26/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 27 | 27/07/2019 | FY2020 | FY2020 Q1 | July | | 7 Monday | 2019 |
| 28 | | | | | | | |

4. Create new column with category- subcategory

The screenshot displays the Power Query Editor interface. The main data table has columns: List Price, Model, Category, Subcategory, and a newly created column 'Category & sub-category'. The formula bar shows the M code: `= Table.RenameColumns("#Reordered Columns1",{{"Merged", "Category & sub-category"}})`. The 'Category & sub-category' column contains concatenated values like 'Components : Road Frames'. The right-hand pane shows the 'Query Settings' for 'Product', with the 'APPLIED STEPS' list including 'Renamed Columns'.

| | 1.2 List Price | A ^B C Model | A ^B C Category | A ^B C Subcategory | A ^B C Category & sub-category | 1.3 Sorting |
|----|----------------|-----------------------------|---------------------------|------------------------------|--|-------------|
| 1 | | 1431.5 HL Road Frame | Components | Road Frames | Components : Road Frames | |
| 2 | | 33.6442 Sport-100 | Accessories | Helmets | Accessories : Helmets | |
| 3 | | 33.6442 Sport-100 | Accessories | Helmets | Accessories : Helmets | |
| 4 | | 34.99 Sport-100 | Accessories | Helmets | Accessories : Helmets | |
| 5 | | 297.6346 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 6 | | 306.5636 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 7 | | 337.22 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 8 | | 297.6346 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 9 | | 306.5636 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 10 | | 337.22 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 11 | | 297.6346 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 12 | | 306.5636 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 13 | | 337.22 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 14 | | 297.6346 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 15 | | 306.5636 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 16 | | 337.22 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 17 | | 297.6346 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 18 | | 306.5636 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 19 | | 337.22 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 20 | | 297.6346 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 21 | | 306.5636 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 22 | | 337.22 LL Road Frame | Components | Road Frames | Components : Road Frames | |
| 23 | | 1191.1739 HL Mountain Frame | Components | Mountain Frames | Components : Mountain Frames | |
| 24 | | 1226.9091 HL Mountain Frame | Components | Mountain Frames | Components : Mountain Frames | |
| 25 | | 1349.6 HL Mountain Frame | Components | Mountain Frames | Components : Mountain Frames | |
| 26 | | 1349.6 HL Mountain Frame | Components | Mountain Frames | Components : Mountain Frames | |
| 27 | | 1349.6 HL Mountain Frame | Components | Mountain Frames | Components : Mountain Frames | |
| 28 | | | | | | |

11 COLUMNS, 397 ROWS Column profiling based on top 1000 rows

PREVIEW DOWNLOADED ON FRIDAY

5. Separate Customers first name and last name from customer column

The screenshot shows the Power Query Editor interface. The ribbon is set to the 'Transform' tab, and the 'Split Column' button is highlighted with a red box. The data table below shows the results of the split operation, with columns for 'C - First Name' and 'C - Last name'. The 'APPLIED STEPS' pane on the right shows the 'Renamed Columns' step selected.

Table: Customer Data

| Index | Customer ID | Customer | C - First Name | C - Last name | City | State-Province |
|-------|-------------|------------|----------------|---------------|---------|----------------|
| 1 | 11024 | AW00011024 | Russell | Xie | Concord | California |
| 2 | 11081 | AW00011081 | Savannah | Baker | Concord | California |
| 3 | 11160 | AW00011160 | Maurice | Tang | Concord | California |
| 4 | 11161 | AW00011161 | Emily | Wood | Concord | California |
| 5 | 11184 | AW00011184 | Meghan | Hernandez | Concord | California |
| 6 | 11295 | AW00011295 | Taylor | Lewis | Concord | California |
| 7 | 11329 | AW00011329 | Andy | Alvarez | Concord | California |
| 8 | 11499 | AW00011499 | Pedro | Vance | Concord | California |
| 9 | 11539 | AW00011539 | Justin | Washington | Concord | California |
| 10 | 11655 | AW00011655 | Tamara | Sharma | Concord | California |
| 11 | 11733 | AW00011733 | Kristi | Schmidt | Concord | California |
| 12 | 11851 | AW00011851 | Jada | Mitchell | Concord | California |
| 13 | 11853 | AW00011853 | Grace | Jones | Concord | California |
| 14 | 11945 | AW00011945 | Dennis | Huang | Concord | California |
| 15 | 12146 | AW00012146 | Xavier | Thomas | Concord | California |
| 16 | 12411 | AW00012411 | Kevin | Alexander | Concord | California |
| 17 | 12429 | AW00012429 | Melvin | Black | Concord | California |
| 18 | 13017 | AW00013017 | Xavier | Alexander | Concord | California |
| 19 | 13060 | AW00013060 | Eugene | Zhu | Concord | California |
| 20 | 13162 | AW00013162 | Nina | Nath | Concord | California |
| 21 | 13167 | AW00013167 | Mario | Tang | Concord | California |
| 22 | 13189 | AW00013189 | Gloria | Romero | Concord | California |
| 23 | 13208 | AW00013208 | Cassidy | Bryant | Concord | California |
| 24 | 13219 | AW00013219 | Rafael | Shan | Concord | California |
| 25 | 13333 | AW00013333 | Tara | Chander | Concord | California |
| 26 | 13360 | AW00013360 | Jada | Cook | Concord | California |
| 27 | 13365 | AW00013365 | Luke | Shan | Concord | California |

6. Create New table with Product Category (Grouped) and sum of Total sales

N Assignment - Power BI Desktop

File Home Help Table tools

Name Product Category S...

Mark as date table Calendars

Manage relationships Relationships

New Quick New New
measure measure column table
Calculations

Structure

1

| Product | Category | Product Category | Sales |
|-------------------------|-------------|---|--------|
| Mountain Tire Tube | Accessories | Mountain Tire Tube : - Accessories | 15475 |
| Water Bottle - 30 oz. | Accessories | Water Bottle - 30 oz. : - Accessories | 28738 |
| Mountain Bottle Cage | Accessories | Mountain Bottle Cage : - Accessories | 20250 |
| Road Bottle Cage | Accessories | Road Bottle Cage : - Accessories | 15408 |
| Patch Kit/8 Patches | Accessories | Patch Kit/8 Patches : - Accessories | 10580 |
| Hitch Rack - 4-Bike | Accessories | Hitch Rack - 4-Bike : - Accessories | 237120 |
| Bike Wash - Dissolver | Accessories | Bike Wash - Dissolver : - Accessories | 18671 |
| Fender Set - Mountain | Accessories | Fender Set - Mountain : - Accessories | 46662 |
| All-Purpose Bike Stand | Accessories | All-Purpose Bike Stand : - Accessories | 39591 |
| Sport-100 Helmet, Black | Accessories | Sport-100 Helmet, Black : - Accessories | 161199 |
| Hydration Pack - 70 oz. | Accessories | Hydration Pack - 70 oz. : - Accessories | 105865 |
| Sport-100 Helmet, Red | Accessories | Sport-100 Helmet, Red : - Accessories | 158088 |
| Minipump | Accessories | Minipump : - Accessories | 13522 |
| Road Tire Tube | Accessories | Road Tire Tube : - Accessories | 9504 |
| Touring Tire Tube | Accessories | Touring Tire Tube : - Accessories | 7440 |
| LL Mountain Tire | Accessories | LL Mountain Tire : - Accessories | 21550 |
| ML Mountain Tire | Accessories | ML Mountain Tire : - Accessories | 34830 |
| HL Mountain Tire | Accessories | HL Mountain Tire : - Accessories | 48860 |
| LL Road Tire | Accessories | LL Road Tire : - Accessories | 22968 |
| ML Road Tire | Accessories | ML Road Tire : - Accessories | 23150 |
| HL Road Tire | Accessories | HL Road Tire : - Accessories | 28314 |
| Touring Tire | Accessories | Touring Tire : - Accessories | 27115 |
| Sport-100 Helmet, Blue | Accessories | Sport-100 Helmet, Blue : - Accessories | 165774 |
| Cable Lock | Accessories | Cable Lock : - Accessories | 16229 |
| Mountain-500 Black, 42 | Bikes | Mountain-500 Black, 42 : - Bikes | 136296 |
| Mountain-500 Black, 44 | Bikes | Mountain-500 Black, 44 : - Bikes | 125928 |

Table: Product Category Sales (295 rows, 266 filtered rows)

Data

Search

- All Data
- Customer
- Date
- Product
- Product Category Sales
 - Category
 - Product
 - Product Category
 - Σ Sales
- Reseller
- Sales
- Sales Order
- Sales Territory

7. Round the Sale Amount

The screenshot shows the Power Query Editor interface. The main area displays a table with columns: 1.2 Unit Price, 1.2 Extended Amount, Unit Price Discount Pct, 1.2 Product Standard Cost, 1.2 Total Product Cost, and 1.2 Sales Amount. The 'Sales Amount' column is selected, and a context menu is open with the 'Round' option highlighted. The 'Round' submenu is also visible, showing options like 'Round Up' and 'Round Down'. The 'Query Settings' pane on the right shows the 'PROPERTIES' tab with the 'Name' set to 'Sales' and the 'APPLIED STEPS' list containing 'Source', 'Navigation', 'Promoted Headers', and 'Changed Type'. The 'Rounded Off' step is highlighted in the 'APPLIED STEPS' list.

Table Structure (Columns):

- 1.2 Unit Price
- 1.2 Extended Amount
- Unit Price Discount Pct
- 1.2 Product Standard Cost
- 1.2 Total Product Cost
- 1.2 Sales Amount

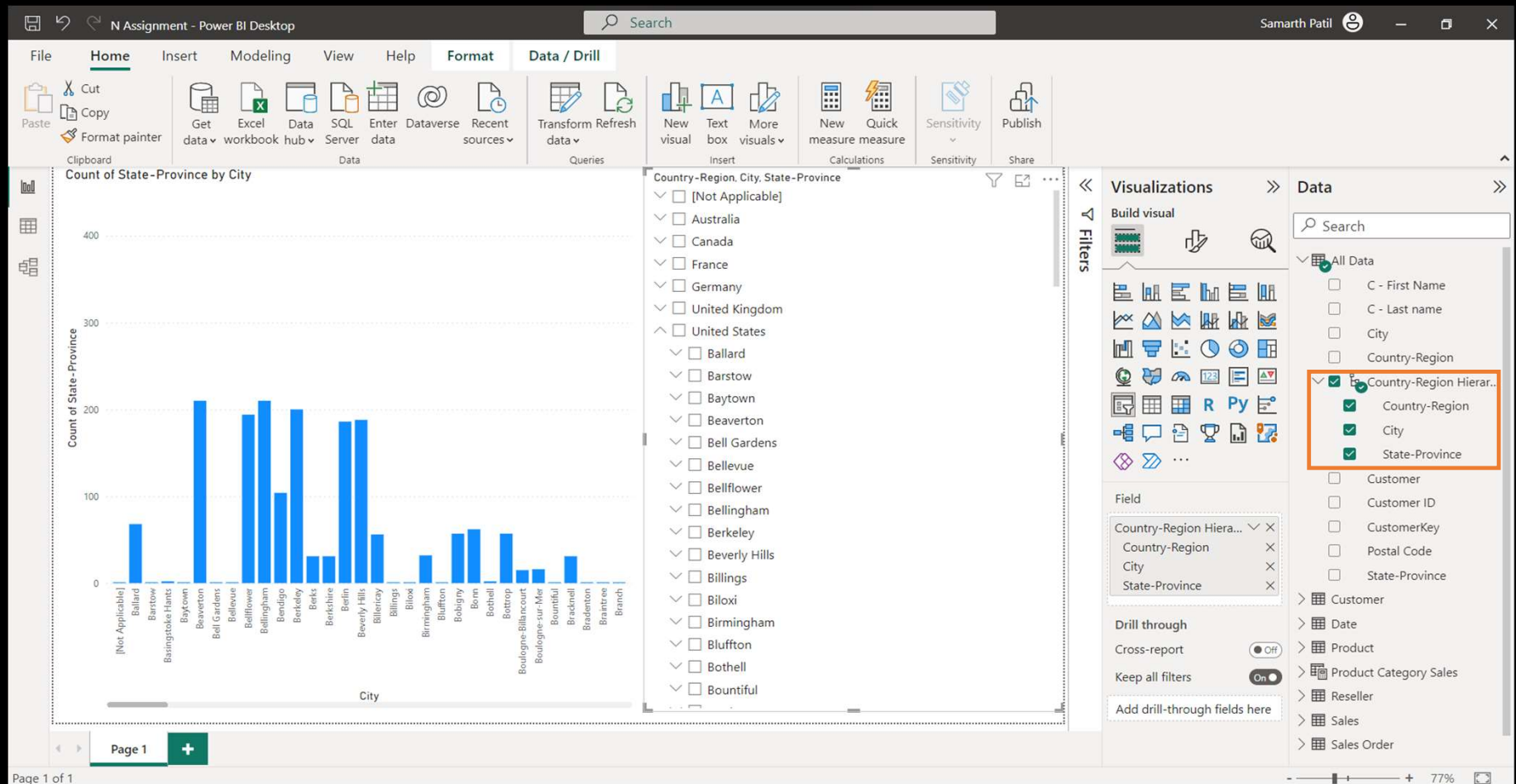
Query Formula:

```
Table.TransformColumnTypes(#Promoted Headers,{{"SalesOrderLineKey", Int64.Type}, {"ResellerKey", Int64.Type}, {"CustomerKey", Int64.Type}})
```

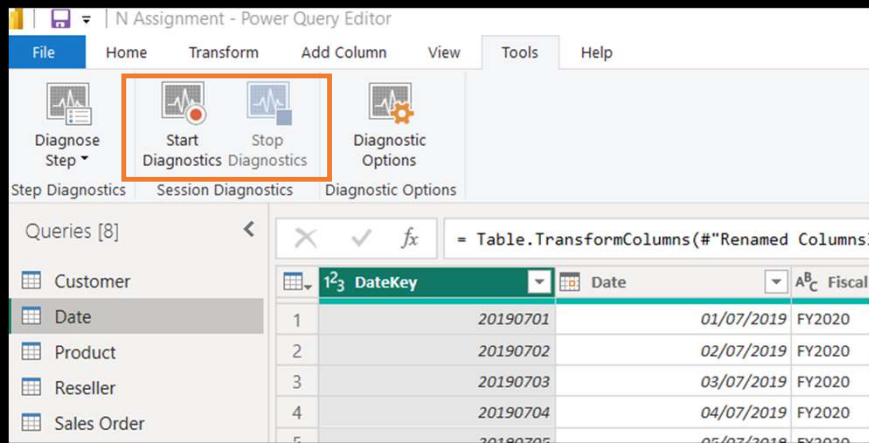
Query Settings:

- PROPERTIES**
 - Name: Sales
- APPLIED STEPS**
 - Source
 - Navigation
 - Promoted Headers
 - Changed Type
 - X Rounded Off**

8. You have been asked to create a hierarchy in the dashboard. By using the given dataset. (Country-region > State-Province > City)



9. You have been asked to check the query performance using power query diagnostics and comment on it.



Whenever you start diagnostics, Power Query begins tracing any evaluations that you cause. The evaluation that most users think of is when you press refresh, or when you retrieve data for the first time, but there are many actions that can cause evaluations, depending on the connector.

With Query Diagnostics, you can achieve a better understanding of what Power Query is doing at authoring and at refresh time in Power BI Desktop.