

1. What is the purpose of the "Applied Steps" pane in Power Query?

The "Applied Steps" pane shows a sequential list of all the transformations applied to your data. It helps track, edit, and troubleshoot each step of your query.

2. How do you remove duplicate rows in Power Query?

Go to the "Home" tab → Click on "Remove Rows" → Select "Remove Duplicates".

3. What does the "Filter" icon do in Power Query?

The filter icon (next to column headers) allows you to include or exclude specific values or set conditions (e.g., greater than, contains) to filter rows.

4. How would you rename a column from "CustID" to "CustomerID"?

Right-click on the column "CustID" → Choose "Rename" → Type "CustomerID".

Or in M-code:

```
=Table.RenameColumns(Source, {"CustID", "CustomerID"})
```

5. What happens if you click "Close & Apply" in Power Query?

It saves transformations and loads the processed data into the Power BI data model, making it ready for use in reports.

6. Remove all rows where Quantity is less than 2.

Go to the Quantity column → Filter icon → Select Number Filters → Greater than or equal to → Enter 2.

M-code:

```
=Table.SelectRows(Source, each [Quantity] >= 2).
```

7. Split the OrderDate column into separate "Year," "Month," and "Day" columns.

Go to Add Column → Date → Select Year, Month, and Day.

Or use M-code:

```
=Table.AddColumn(Source, "Year", each Date.Year([OrderDate]))
```

```
=Table.AddColumn(Source, "Month", each Date.Month([OrderDate]))
```

```
=Table.AddColumn(Source, "Day", each Date.Day([OrderDate]))
```

8. Replace all "Mouse" entries in the Product column with "Computer Mouse."

Right-click Product column → Replace Values → Replace "Mouse" with "Computer Mouse".

M-code:

```
=Table.ReplaceValue(Source, "Mouse", "Computer Mouse",  
Replacer.ReplaceText, {"Product"})
```

9. Sort the table by OrderDate (newest first).

Click on OrderDate column → Sort Descending.

M-code:

```
=Table.Sort(Source, {"OrderDate", Order.Descending})
```

10. How would you handle null values in the Price column?

Option 1: Replace nulls with a default value:

Transform tab → Replace Values → Replace null with 0.

M-code:

```
=Table.ReplaceValue(Source, null, 0, Replacer.ReplaceValue, {"Price"})
```

Option 2: Remove rows with null prices:

=Table.SelectRows(Source, each [Price] <> null)

11. Write custom M-code to add a column calculating TotalSpent = Quantity * Price.

=Table.AddColumn(Source, "TotalSpent", each [Quantity] * [Price], type number)

12. Group the table by CustID to show total spending per customer. Go to Transform tab → Click Group By → Group by CustID, create a new column "TotalSpent" using Sum on TotalSpent column. M-code:

=Table.Group(Source, {"CustID"}, {"TotalSpending", each List.Sum([TotalSpent]), type number})

13. Fix inconsistent date formats (e.g., 01/10/2023 vs. 2023-01-10) in OrderDate.

Change column type to Date using:
Transform → Data Type → Select Date.
Power Query auto-recognizes and unifies formats.

M-code:

=Table.TransformColumnTypes(Source, {"OrderDate", type date})

14. Create a conditional column: Label orders as "High Value" if Price > 100. Go to Add Column → Conditional Column → If Price > 100 then "High Value" else "Normal".

M-code:

=Table.AddColumn(Source, "ValueLabel", each if [Price] > 100 then "High Value" else "Normal", type text)

15. Optimize the query to reduce refresh time (e.g., remove unused columns early).

Use Remove Other Columns or Remove Columns as early as possible in the query. This limits memory usage and speeds up processing. Example:

=Table.SelectColumns(Source, {"OrderID", "Product", "Quantity", "Price", "OrderDate"})