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1. What is the purpose of the "Applied Steps" pane in Power Query?
The Applied Steps pane lists all the transformations you've applied to your dataset. It helps you track, edit, or remove each step, allowing for repeatable and transparent data transformation processes.

2. How do you remove duplicate rows in Power Query?
Select one or more columns, then go to the Home tab > Remove Rows > Remove Duplicates. This removes all but the first occurrence of each duplicate.

3. What does the "Filter" icon do in Power Query?
The filter icon lets you narrow down rows in your dataset based on criteria. You can filter values, set conditions (e.g., Quantity > 1), or exclude blanks.

4. How would you rename a column from "CustID" to "CustomerID"?
Right-click the column header and choose "Rename", or select the column and click Transform > Rename. Then type the new name: CustomerID.

5. What happens if you click "Close & Apply" in Power Query?
All applied transformations are saved and pushed into Power BI. It exits Power Query and loads the transformed data into the Power BI data model.

6. Remove all rows where Quantity is less than 2
Click the filter icon on Quantity > Number Filters > Greater than or equal to > 2.
M-code:

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

7. Split the OrderDate column into separate "Year," "Month," and "Day" columns
Select OrderDate, then go to Add Column > Date > Year, Month, and Day respectively.
Alternatively: Transform > Date > Year/Month/Day.

8. Replace all "Mouse" entries in the Product column with "Computer Mouse"
Right-click Product > Replace Values > Find: Mouse, Replace with: Computer Mouse.
M-code:

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

9. Sort the table by OrderDate (newest first)
Click on the OrderDate column, then use the "Sort Descending" button on the toolbar.

10. How would you handle null values in the Price column?
Either filter them out (Remove Rows > Remove Blank Rows) or replace them (Transform > Replace Values > Replace null with 0).
M-code example:

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

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

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

12. Group the table by CustID to show total spending per customer
Select CustID > Transform > Group By > Sum TotalSpent.
M-code:

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

13. Fix inconsistent date formats (e.g., 01/10/2023 vs. 2023-01-10) in OrderDate
Select OrderDate > Transform > Data Type > Date.
If Power Query misinterprets, use Transform > Using Locale to specify the expected format.

14. Create a conditional column: Label orders as "High Value" if Price > 100
Add Column > Conditional Column
If Price > 100 then "High Value", else "Standard"
M-code:

```
= Table.AddColumn(PreviousStep, "ValueLabel", each if [Price] > 100 then "High Value" else "Standard")
```

15. Optimize the query to reduce refresh time (e.g., remove unused columns early)
Remove unnecessary columns as the first step using Table.SelectColumns.
M-code example:

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