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

The "Applied Steps" pane records each transformation you've applied to your data (e.g., filtering, renaming, changing data types). It's useful for:

- Reviewing changes
- Reordering or removing steps
- Debugging errors in transformations

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

- Select the columns you want to check for duplicates
- Click "Home → Remove Rows → Remove Duplicates"

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

The **filter icon** allows you to:

- Include/exclude specific values
- Apply numeric, text, or date filters
- Sort data (ascending or descending)

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

- Right-click the "CustID" column header → choose Rename
- Or click the column and press F2, then type "CustomerID"

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

- Applies all transformations to the data
- Loads the cleaned data into Power BI Desktop's Data Model

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

- Click the Quantity column → Home → Keep Rows → Keep Rows Where...
- Set the condition: Quantity ≥ 2

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

- 1. Select OrderDate
- Go to Add Column → Date → Year/Month/Day → Name accordingly (or right-click column → Split Column → By Delimiter, if it's text-formatted)

- 8. Replace all "Mouse" entries in the Product column with "Computer Mouse."
  - Select Product column → Transform → Replace Values
  - Value to find: "Mouse" → Replace with: "Computer Mouse"
- 9. Sort the table by OrderDate (newest first).
  - Click OrderDate column header → Home → Sort Descending
- 10. How would you handle null values in the Price column?
  - Option 1: Replace nulls: Select Price → Transform → Replace Values → null → 0
  - Option 2: Remove rows: Home → Remove Rows → Remove Blank Rows
- 11. Write custom M-code to add a column calculating TotalSpent = Quantity \* Price.

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= Table.AddColumn(PreviousStepName, "TotalSpent", each [Quantity] \* [Price])

(Replace PreviousStepName with the actual step name in your query.)

- 12. Group the table by CustID to show total spending per customer.
  - 1. Go to Transform → Group By
  - 2. Group by: CustID
  - 3. New column name: TotalSpent
  - 4. Operation: Sum
  - 5. Column: TotalSpent (must already be calculated)
- 13. Fix inconsistent date formats (e.g., 01/10/2023 vs. 2023-01-10) in OrderDate.
  - Select the OrderDate column → Transform → Data Type → Date
  - If text format: use Transform → Using Locale → Date → English (UK/US) to standardize
- 14. Create a conditional column: Label orders as "High Value" if Price > 100.

Go to Add Column → Conditional Column:

New column name: OrderLabel

• Condition: If [Price] > 100 then "High Value" else "Standard"

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

# Best practice:

- Remove unnecessary columns first (right-click → Remove Columns)
- Apply heavy steps like joins, groupings, or calculations after filtering
- **Disable "Auto Date/Time"** in Power BI options
- Reduce number of rows during development (e.g., using filters)