# 1. Purpose of the "Applied Steps" pane in Power Query

- Shows a sequential list of transformations you applied (e.g., filter, rename, merge).
- You can edit, reorder, or delete steps to adjust your data cleaning process.

# 2. How to remove duplicate rows in Power Query

- Select the columns to check for duplicates.
- Go to Home  $\rightarrow$  Remove Rows  $\rightarrow$  Remove Duplicates.

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

• Filters rows by specific values, ranges, or conditions (similar to Excel filters).

#### 4. Rename a column from "CustID" to "CustomerID"

- Right-click column header  $\rightarrow$  **Rename**  $\rightarrow$  type *CustomerID*.
- M-code example:
- Table.RenameColumns(Source, {{"CustID", "CustomerID"}})

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

 Saves applied transformations and loads the cleaned data back into Power BI for visualization.

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

- Filter column Quantity → choose Greater than or equal to 2.
- M-code:
- Table.SelectRows(Source, each [Quantity] >= 2)

# 7. Split OrderDate into "Year," "Month," and "Day"

- Select OrderDate  $\rightarrow$  Transform  $\rightarrow$  Date  $\rightarrow$  Year/Month/Day  $\rightarrow$  Extract.
- Creates three separate columns.

# 8. Replace all "Mouse" entries in Product with "Computer Mouse"

- Select Product column → Transform → Replace Values.
- M-code:
- Table.ReplaceValue(Source, "Mouse", "Computer Mouse", Replacer.ReplaceText, {"Product"})

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

• Select OrderDate → Sort Descending.

#### 10. Handle null values in the Price column

- Options:
  - Replace nulls  $\rightarrow$  Transform  $\rightarrow$  Replace Values  $\rightarrow$  null  $\rightarrow$  0
  - o Remove nulls → Remove Rows → Remove Blank Rows
  - $\circ$  Fill nulls  $\rightarrow$  Transform  $\rightarrow$  Fill Down/Up

## 11. Custom M-code to add TotalSpent = Quantity \* Price

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

### 12. Group by CustID to show total spending per customer

- Home  $\rightarrow$  Group By  $\rightarrow$  CustID
- Aggregation → Sum of TotalSpent

#### M-code:

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

### 13. Fix inconsistent date formats in OrderDate

- Select OrderDate → Change Type → Date → Using Locale
- Choose the correct locale (e.g., US: MM/DD/YYYY, UK: DD/MM/YYYY).

### 14. Create a conditional column: High Value if Price > 100

- Add Column → Conditional Column
- Rule: If [Price] > 100 then "High Value" else "Normal".

#### M-code:

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

# 15. Optimize query to reduce refresh time

- Remove unused columns early: Home → Remove Columns
- Apply filters before merging large datasets.
- Disable "Enable Load" for intermediate queries not needed in the report.