

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

It shows the sequence of transformations applied to the data (like a history of steps). Each step can be edited, reordered, or removed.

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

- Select the relevant columns → Right-click → **Remove Duplicates**.

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

It allows you to filter rows by values, conditions, or ranges (similar to Excel filters).

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

- Right-click the column header → **Rename** → type `CustomerID`.
M-code example:

```
= Table.RenameColumns("#Changed Type",{{"CustID", "CustomerID"}})
```

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

The transformed data is **loaded into Power BI Desktop's data model** and Power Query closes.

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

Filter the Quantity column → **Number Filters** → **Greater Than or Equal To 2**.

M-code:

```
= Table.SelectRows("#Renamed Columns", each [Quantity] >= 2)
```

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

- Select OrderDate → **Split Column** → **By Date** → Year/Month/Day.

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

- Right-click Product column → **Replace Values** → find "Mouse", replace with "Computer Mouse".

M-code:

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

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

- Click the dropdown on OrderDate → **Sort Descending**.

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

Options:

- Replace nulls with a default (e.g., 0).
- Remove rows containing nulls.
- Fill down/up if appropriate.

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

```
= Table.AddColumn("#Sorted Rows", "TotalSpent", each [Quantity]*[Price])
```

12. Group the table by CustID to show total spending per customer.

- Home → **Group By** → Group by CustID → Operation: Sum of TotalSpent.

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

- Change data type of OrderDate column to **Date** → Power Query automatically standardizes formats.

14. Create a conditional column: Label orders as "High Value" if Price > 100.

- Add Column → **Conditional Column** → If Price > 100 then "High Value" else "Normal".

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

- **Remove unnecessary columns** as early as possible.
- Apply filters before joins/merges.
- Disable loading intermediate queries.
- Avoid steps that keep unneeded data in memory.