♦ General Questions

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

It shows each transformation step applied to your data, allowing you to track, edit, reorder, or remove steps.

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

Go to the **Home** tab \rightarrow Click **Remove Rows** \rightarrow **Remove Duplicates**.

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

It allows you to filter rows based on values in a column (e.g., keep only specific dates, values, ranges).

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

Right-click the **CustID** column header \rightarrow choose **Rename** \rightarrow type **CustomerID**.

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

It applies all transformations and loads the data back into Power BI or Excel.

♦ Transformation Tasks

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

- Use the filter dropdown on Quantity → Select Number Filters → is greater than or equal to → enter 2.
- 7. Split the OrderDate column into "Year", "Month", and "Day".
 - Select OrderDate \rightarrow go to Add Column \rightarrow Date \rightarrow choose Year, Month, and Day.
- 8. Replace all "Mouse" entries in the Product column with "Computer Mouse."
 - Right-click Product column \rightarrow Replace Values \rightarrow find "Mouse", replace with "Computer Mouse".
- 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:
 - o Replace nulls: **Transform** \rightarrow **Replace Values** \rightarrow null \rightarrow 0 or another value.
 - o Or filter out: Home \rightarrow Remove Rows \rightarrow Remove Blank Rows.

♦ Advanced M Code Tasks

11. Write custom M-code to add a column calculating TotalSpent = Quantity * Price. Go to Add Column → Custom Column:

```
= [Quantity] * [Price]
```

- 12. Group the table by CustID to show total spending per customer.
 - Go to **Home** \rightarrow **Group By**:
 - o Group by: CustID
 - o New column: TotalSpent
 - o Operation: Sum of TotalSpent or use custom step to multiply inside.
- 13. Fix inconsistent date formats in OrderDate (e.g., 01/10/2023 vs. 2023-01-10).
 - Ensure **OrderDate** is of **Date** type:
 - Select OrderDate \rightarrow Transform \rightarrow Data Type \rightarrow Date.
- 14. Create a conditional column: Label orders as "High Value" if Price > 100.
 - Go to Add Column → Conditional Column:
 - o Name: OrderValueLabel
 - o Condition: Price > 100 \rightarrow High Value, else \rightarrow Regular.
- 15. Optimize the query to reduce refresh time (e.g., remove unused columns early).
 - Remove unnecessary columns as early as possible:
 - \circ Use **Home** \rightarrow **Choose Columns** to keep only needed ones early in the steps.