Lesson 4: Data Transformation with Power Query (Part 2)

1. What is the difference between 'Merge' and 'Append' in Power Query?

Merge combines columns from two tables based on a key column, while Append stacks rows from two tables with the same structure.

2. How do you split a 'Full Name' column into 'First Name' and 'Last Name'?

Use 'Split Column' > 'By Delimiter' and choose space as the delimiter.

3. What is 'Pivot Columns' used for?

It transforms rows into columns, summarizing values based on a key.

4. How do you undo a step in Power Query?

Right-click the step in 'Applied Steps' and select 'Delete' or use the back arrow.

5. What is the purpose of 'Reference' vs. 'Duplicate' in queries?

Reference creates a linked query that reflects source changes; Duplicate makes a separate static copy.

6. Merge Orders.csv and Customers.xlsx on CustID (inner join).

Use 'Merge Queries' in Power Query, choose CustID in both tables, and select 'Inner Join'.

7. Pivot the Product column to show total Quantity per product.

Select Product and Quantity columns, then choose 'Pivot Column' on Product with sum of Quantity.

8. Append two tables with identical columns (e.g., Orders_Jan.csv + Orders_Feb.csv).

Use 'Append Queries' to stack the two tables vertically.

9. Use 'Fill Down' to replace nulls in the Email column with the previous value.

Select Email column, then use 'Transform' > 'Fill' > 'Down'.

10. Extract the domain (e.g., 'example.com') from the Email column.

Use 'Split Column' by '@' delimiter and keep the second part.

11. Write M-code to merge queries dynamically based on a parameter (e.g., JoinType = 'Inner').

Table.NestedJoin(Orders, {"CustID"}, Customers, {"CustID"}, "NewTable", JoinKind.Inner)

12. Unpivot a table with columns like 'Jan_Sales,' 'Feb_Sales' into 'Month' and 'Sales' format.

Select those columns and use 'Unpivot Columns'.

13. Handle errors in a custom column (e.g., division by zero) using try...otherwise.

try [Numerator]/[Denominator] otherwise null

14. Create a function in Power Query to clean phone numbers (e.g., remove dashes).

Use Text.Remove([PhoneNumber], {"-"}) inside a custom function.

15. Optimize a query with 10+ stepsidentify bottlenecks and simplify.

Remove unused columns early, avoid repeated steps, and group related logic.