

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 queries, while 'Append' stacks rows from two queries.

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

Use 'Split Column' by delimiter (usually a space).

3. What is 'Pivot Columns' used for?

It transforms rows into columns based on a key column.

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

Delete the step from the 'Applied Steps' pane.

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

'Reference' creates a new query linked to the original, while 'Duplicate' copies it independently.

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

Use 'Merge Queries' and select CustID as the key column in both tables.

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

Use 'Pivot Column', select Product, and aggregate by Quantity using Sum.

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

Use 'Append Queries' to combine them.

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

Select the Email column and click 'Fill Down'.

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

Use 'Extract Text After Delimiter' with '@' as the delimiter.

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

```
Table.NestedJoin(Table1, {"Key"}, Table2, {"Key"}, "NewCol", JoinKind.Inner)
```

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

Select those columns, then use 'Unpivot Columns'.

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

`try [Column1] / [Column2] otherwise null`

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

`Text.Remove([Phone], {"-"})`

15. Optimize a query with 10+ steps—identify bottlenecks and simplify.

Review and remove redundant steps, combine transformations, and eliminate unused columns early.