# Lesson-4 Homework

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

Merge combines two tables by matching rows based on one or more columns (like a SQL JOIN). Append stacks two tables with the same structure (like UNION)

1. 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

1. What is 'Pivot Columns' used for?

It converts unique values in a column into separate columns

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

Click the “X” next to the step in the Applied Steps pane or press Ctrl + Z

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

Duplicate creates a copy of the table (independent), “Reference” creates a new query linked to the original

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

Go to Home > Merge Queries > Select 'CustID' in both tables > Choose 'Inner Join'

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

Select 'Product' column > Transform > Pivot Column > Values: Quantity, Aggregation: Sum

1. Append two tables with identical columns (e.g., Orders\_Jan.csv + Orders\_Feb.csv)

Home > Append Queries > Select the two tables to append

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

Select 'Email' column > Transform > Fill > Down

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

# Select 'Email' column >Extract > Text After Delimiter > '@'

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

Table.NestedJoin(Table1, {"CustID"}, Table2, {"CustID"}, "NewTable", JoinKind.Inner)

1. Unpivot a table with columns like 'Jan\_Sales,' 'Feb\_Sales' into a 'Month' and 'Sales' format

Select the columns > Transform > Unpivot Columns

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

try [Column1] / [Column2] otherwise null

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

Text.Select([Phone], {"0".."9"})

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

Remove unused columns early, avoid unnecessary steps, and combine transformations where possible