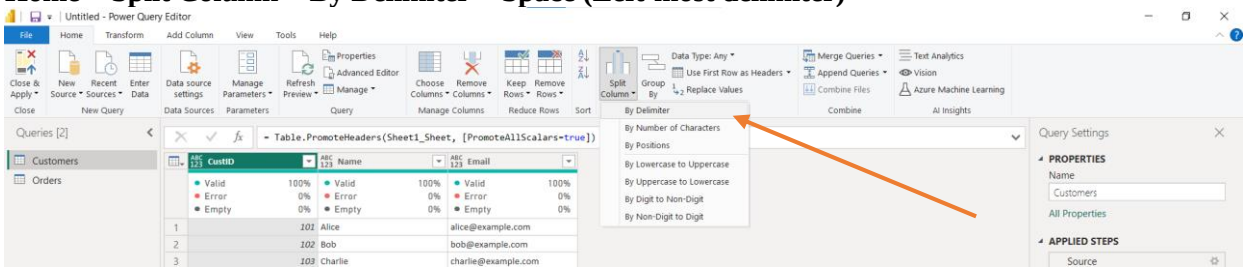
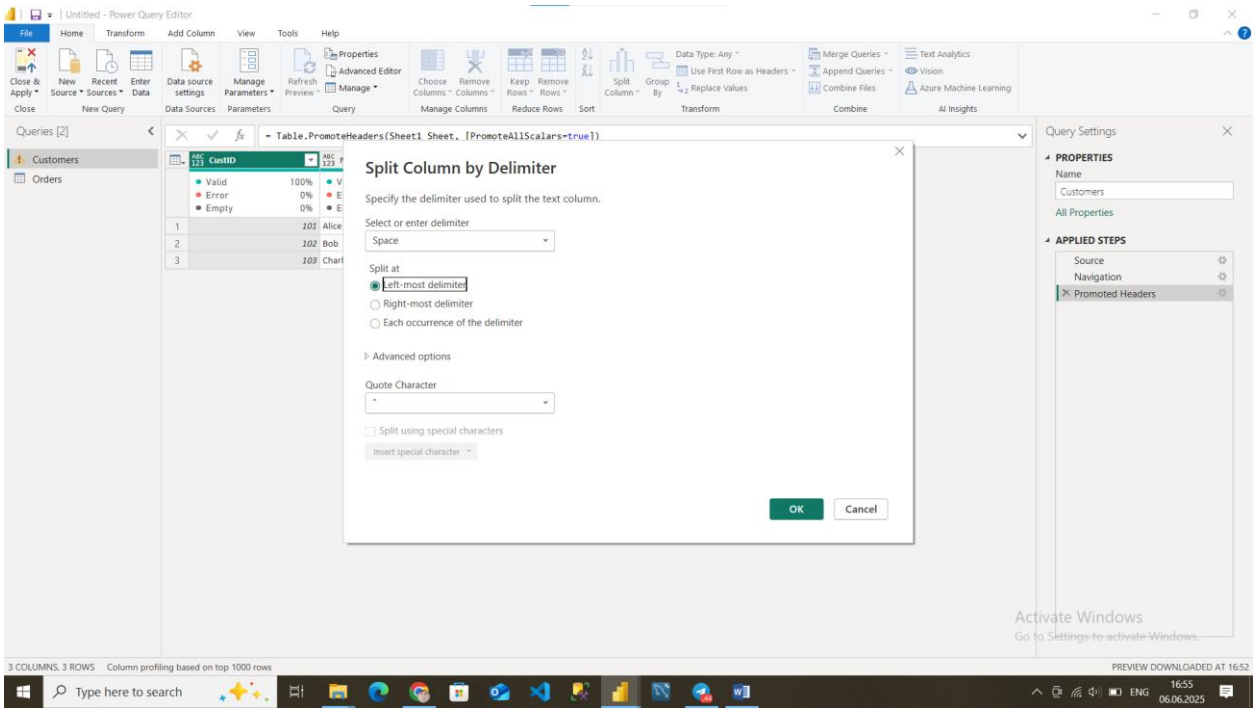
1. **What's the difference between Merge and Append in Power Query?**

- **Merge**: Joins two tables based on a common key (like SQL joins: inner, left, right, etc.)
- **Append**: Stacks two or more tables vertically — rows from one table are added to the end of another.

2. **How to split a "Full Name" column into "First Name" and "Last Name"?**

Home > Split Column > By Delimiter > Space (Left-most delimiter)





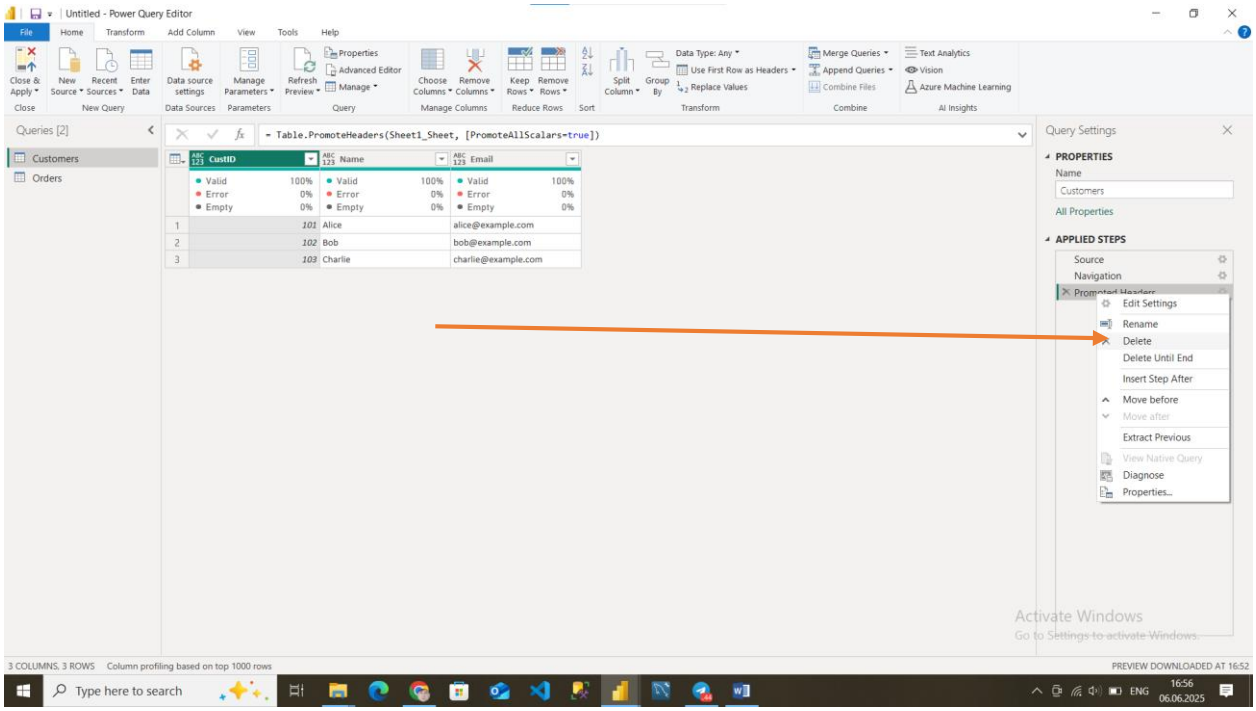
3. **What is "Pivot Columns" used for?**

Transforms **rows into columns or vice versa**.

4. **How to undo a step in Power Query?**

In the **Applied Steps pane** (right-hand side):

- Right-click the step → **Delete**
- Or click the **X** icon beside the step.



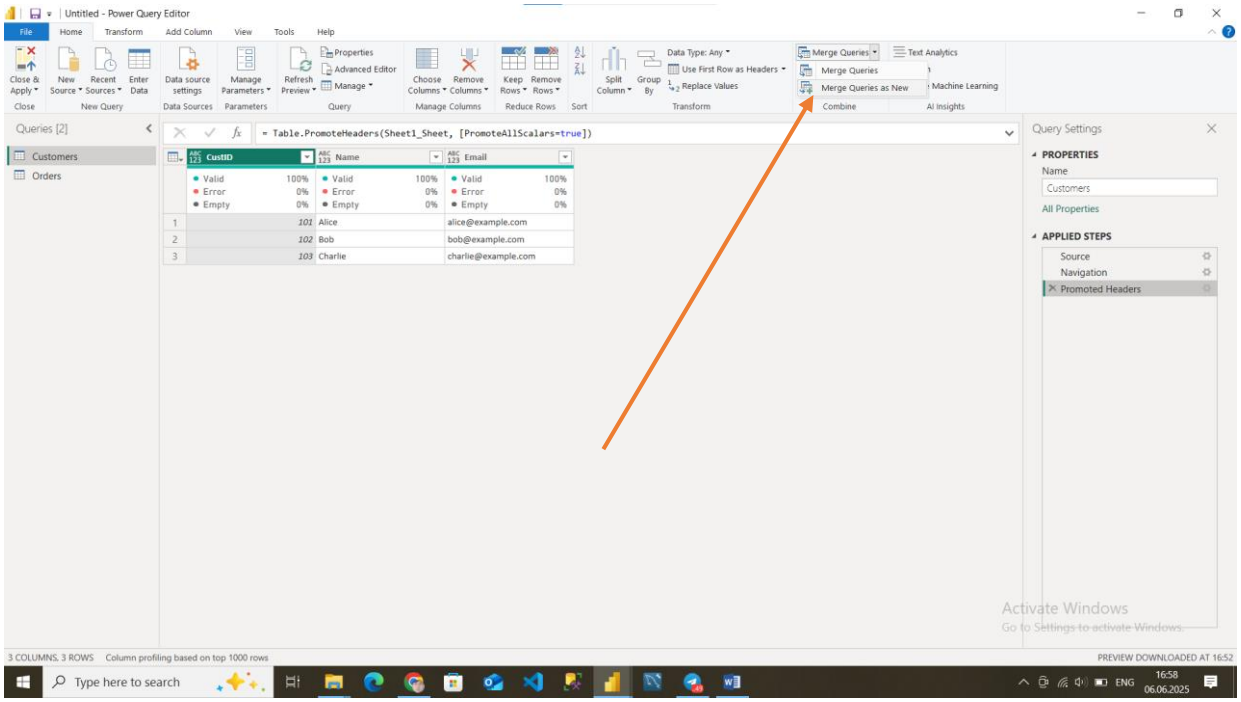
5. **Purpose of Reference vs. Duplicate in queries?**

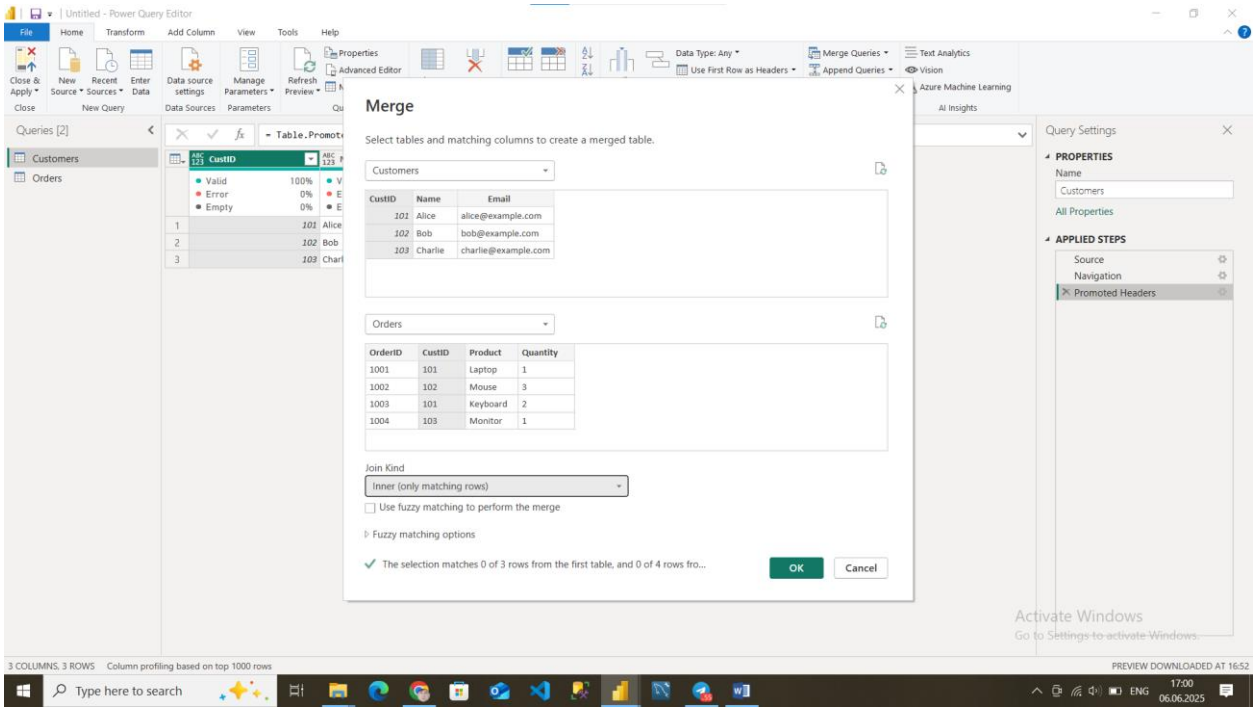
- **Duplicate**: Makes a full **copy** of the query and its applied steps.
- **Reference**: Creates a **linked query** that starts with the output of the original query but lets you add new transformations on top.

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

Home > Merge Queries > Merge Queries as New

- Select **CustID** in both tables.
- Choose **Inner Join**.

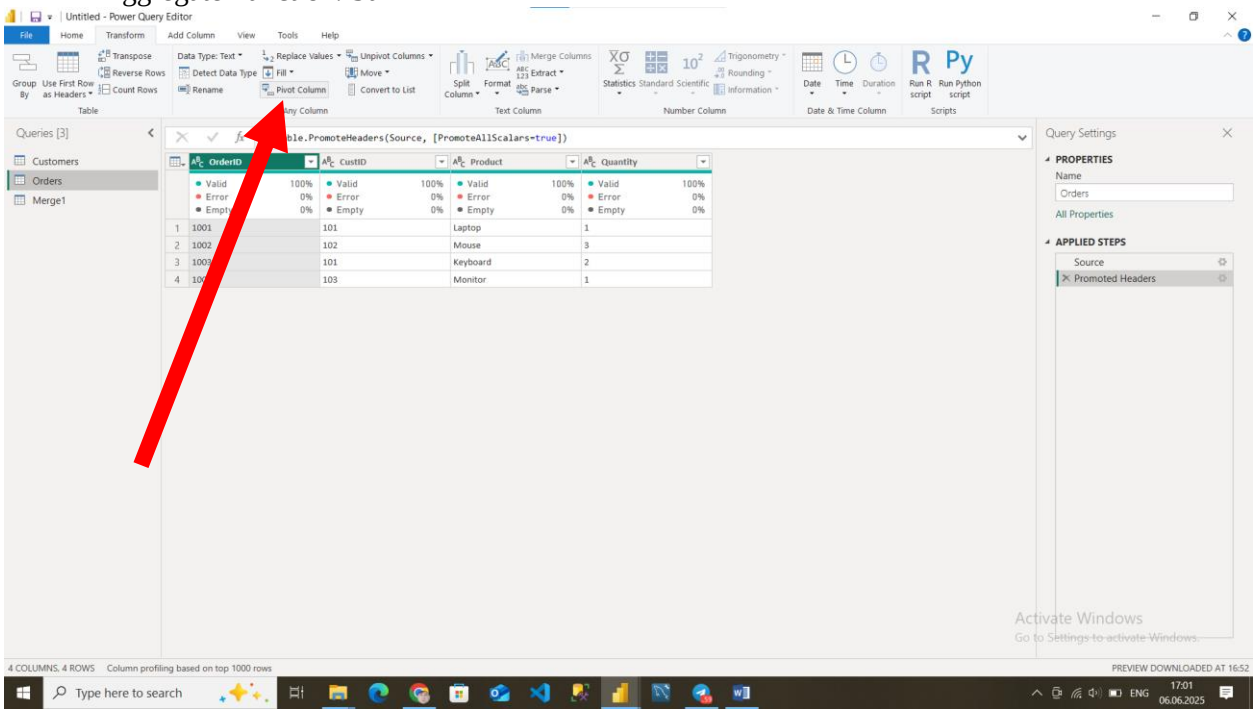


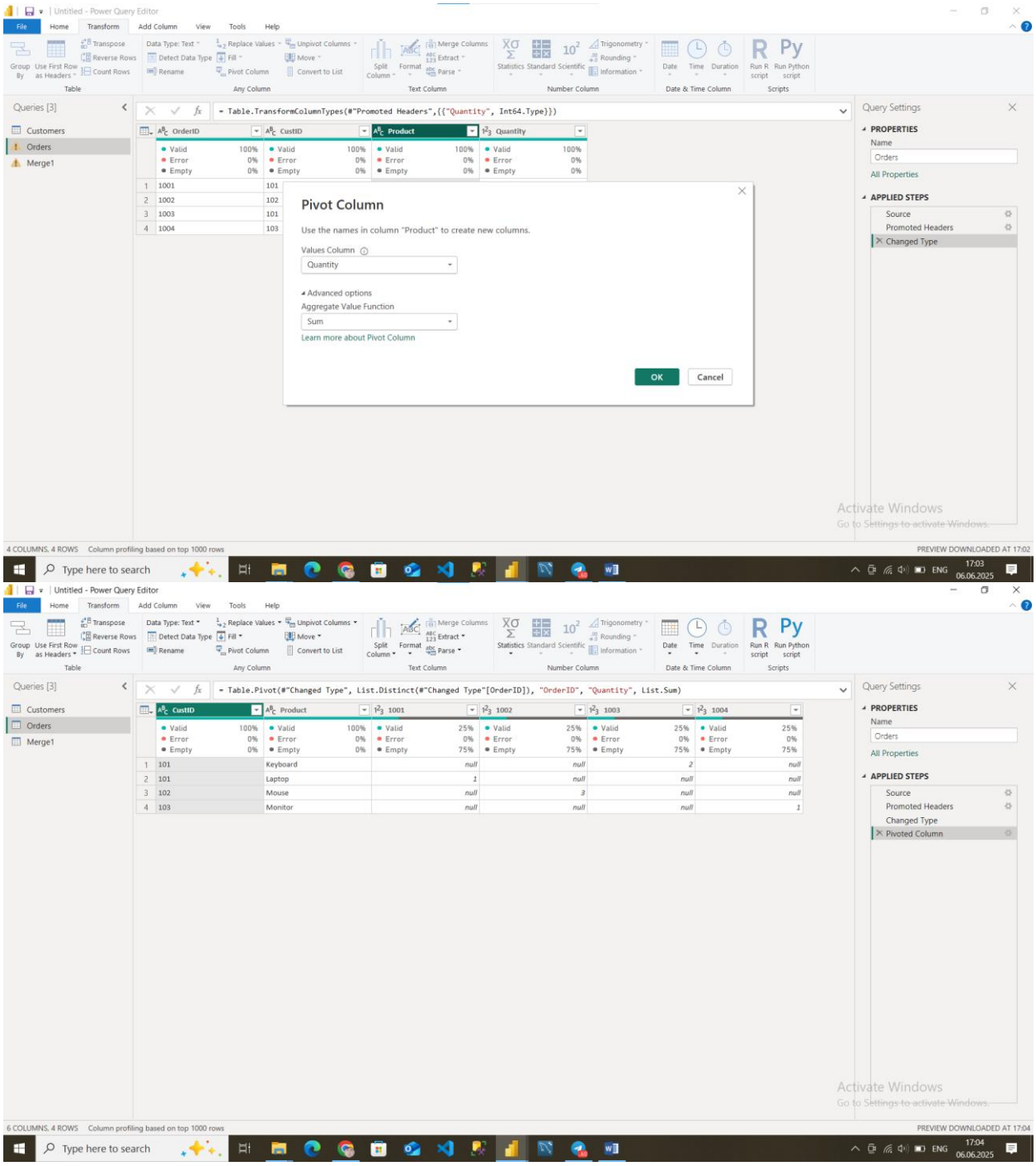


7. Pivot the Product column to show total Quantity per product

Transform > Pivot Column

- Values Column: Quantity
- Aggregate Function: Sum





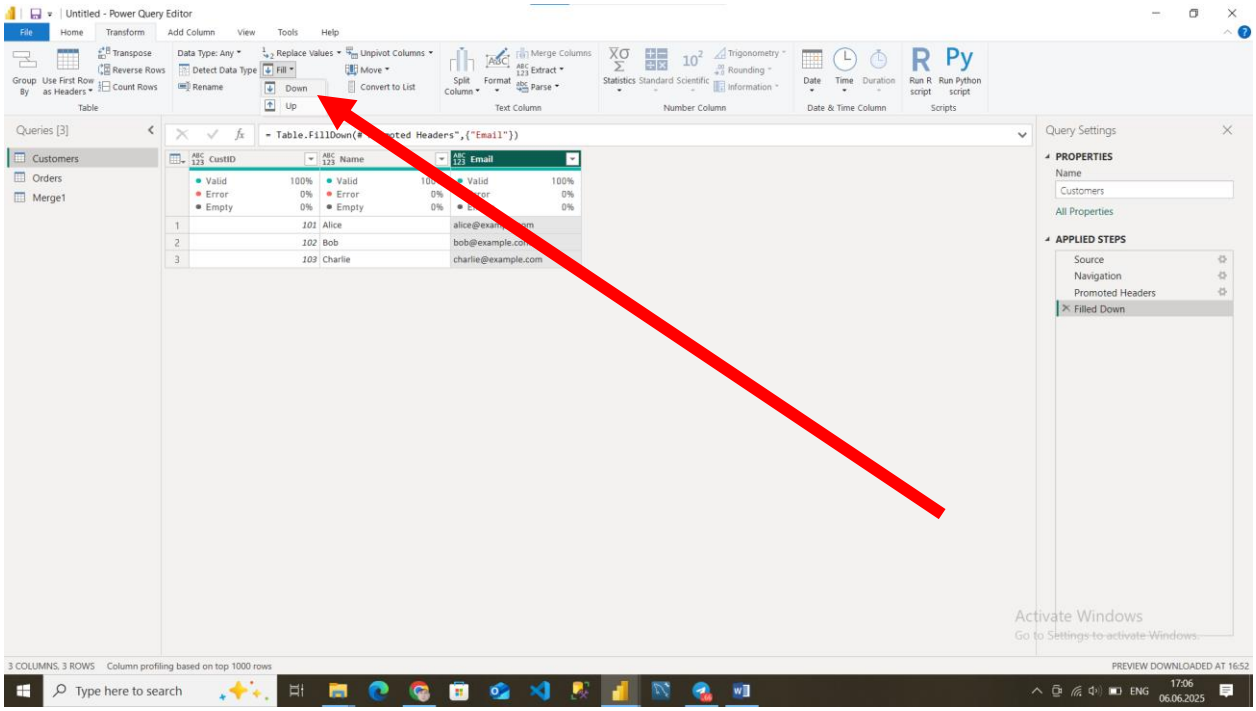
8. Append two tables with identical columns (Orders_Jan + Orders_Feb)

Home > Append Queries > Append Queries as New

- Select both tables.

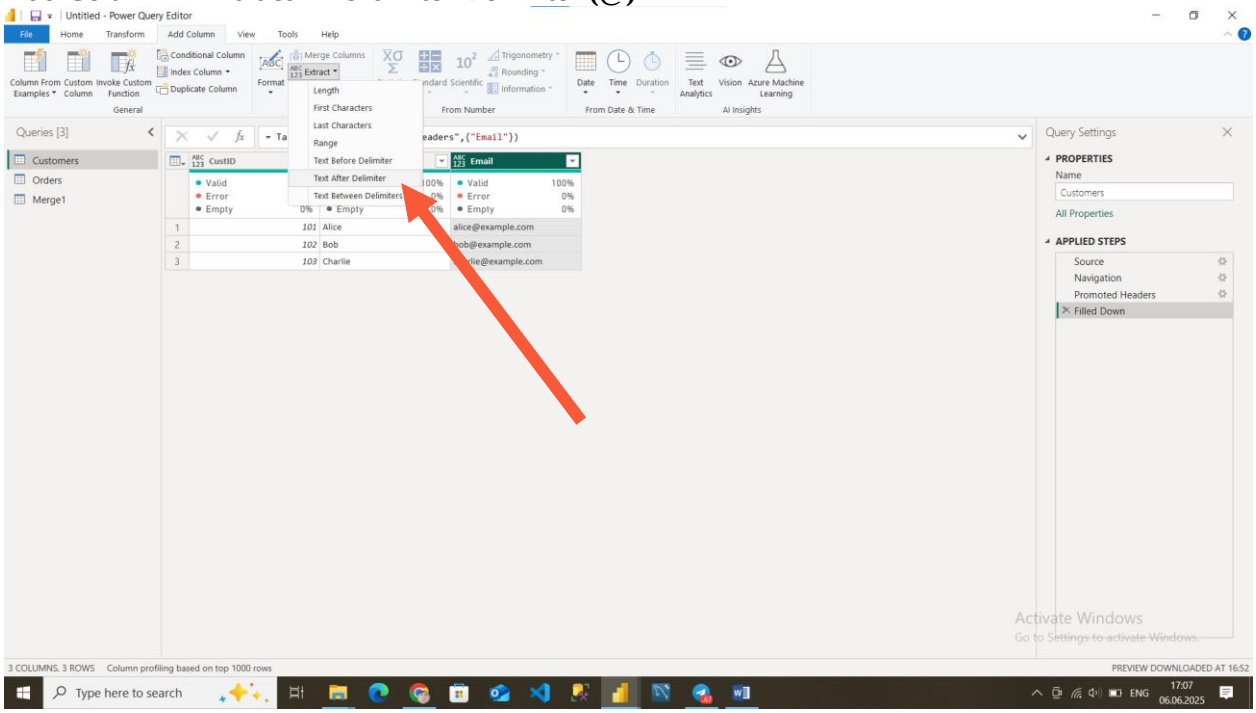
9. Use Fill Down to replace nulls in the Email column with the previous value

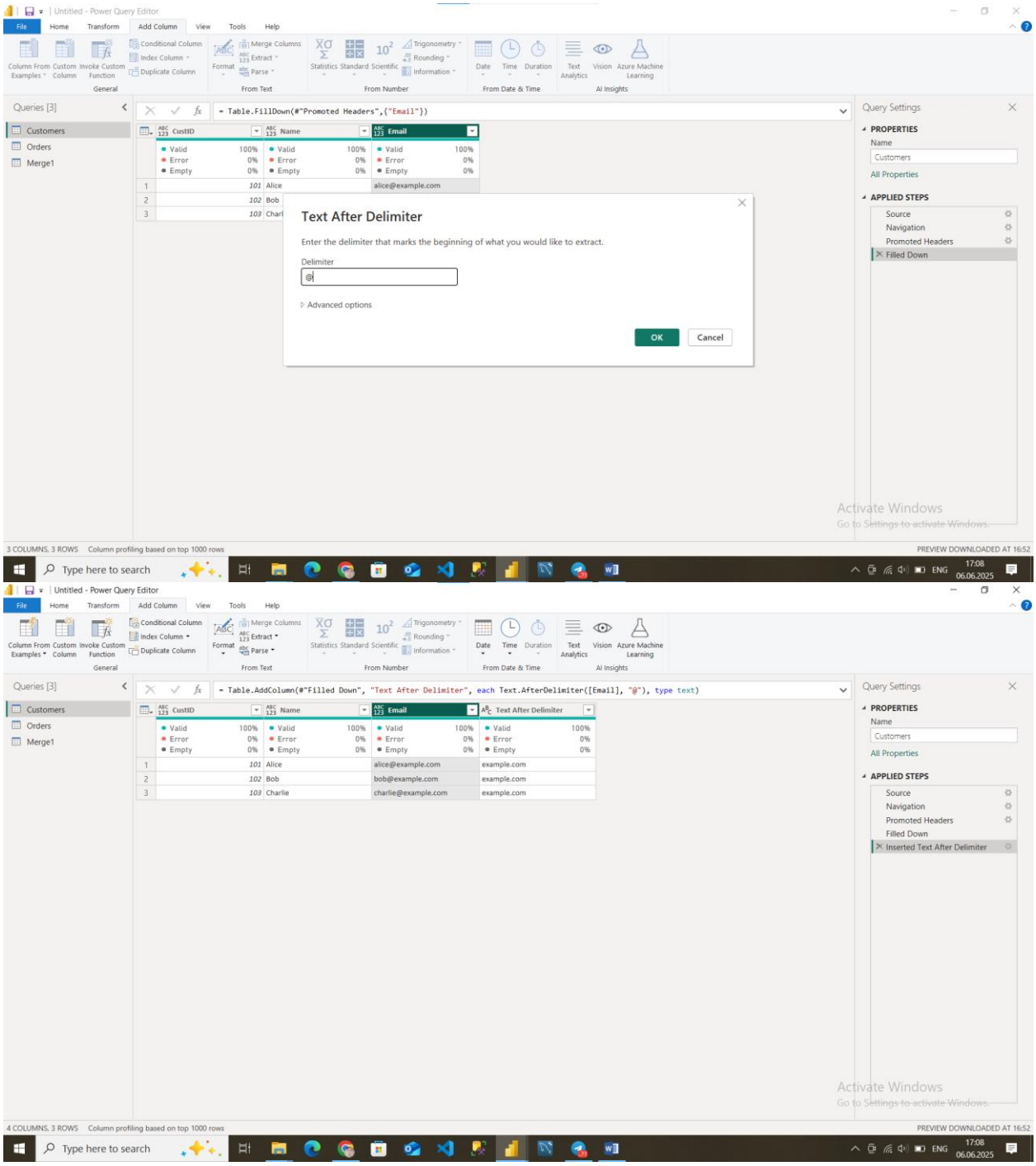
Transform > Fill > Down on the Email column.



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

Add Column > Extract > Text After Delimiter (@)





11. M-code to merge queries dynamically based on a parameter (JoinType = "Inner")

= Table.NestedJoin(Orders, {"CustID"}, Customers, {"CustID"}, "NewColumn", JoinKind.FromText(JoinTypeParam))

12. Unpivot a table with columns like "Jan_Sales," "Feb_Sales"

Transform > Unpivot Columns

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

Use try…otherwise

M code:

= Table.AddColumn(#"Previous Step", "SafeDivision", each try [Value] / [Divisor] otherwise null)

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

Function Definition:

let CleanPhoneNumber = (Phone as text) as text =>

```
    Text.Select(Phone, {"0".."9"})
in CleanPhoneNumber

= Table.AddColumn(#"Previous Step", "CleanPhone", each CleanPhoneNumber([Phone]))
```

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

Tips:

- Disable **Load to worksheet** for intermediate queries.
- Merge transformations (combine filtering/sorting steps).
- Remove redundant or unused steps.
- Use **Reference** instead of **Duplicate** when branching.
- Minimize using **Column profiling** options for large data.
- Consolidate multiple AddColumn steps into a single one where possible.