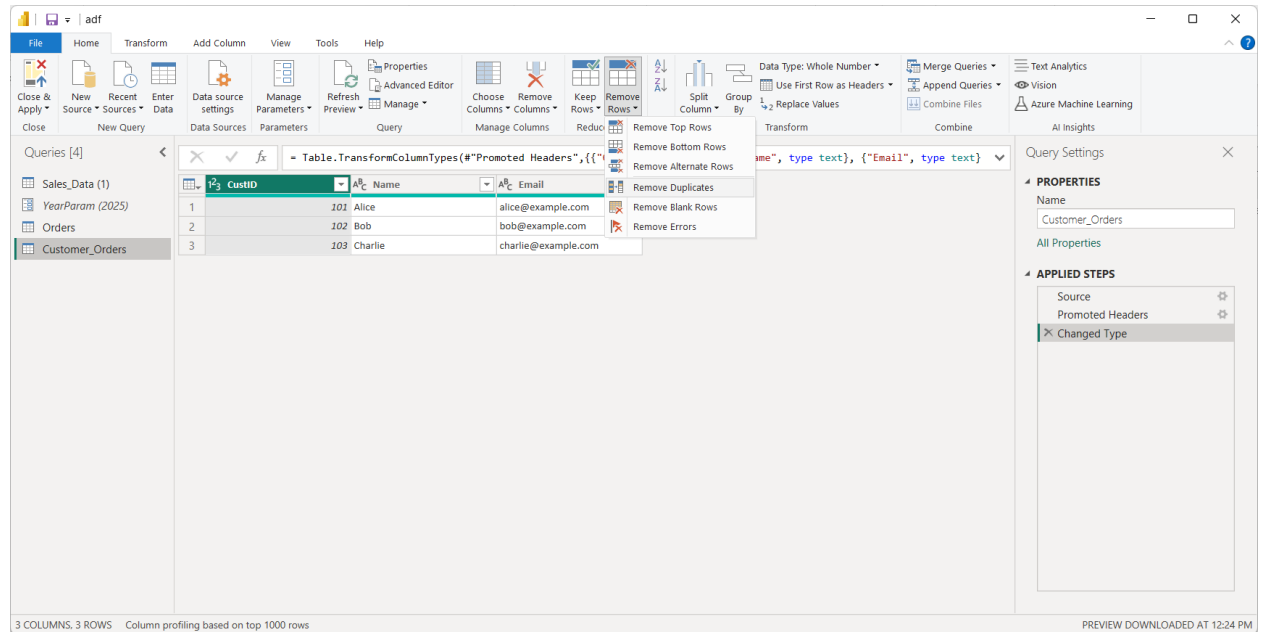


1. What is the purpose of the "Applied Steps" pane in Power Query?

The 'applied steps' in Power Query serves as a record of all the transformations you have applied to your data. It displays a list of these steps in the order they were performed, allowing you to review, modify or remove individual steps to refine your data preparation process.

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



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

The Filter icon in Power Query allows you to include or exclude specific rows based on column values. You can filter by text, numbers, dates, or conditions like "greater than" or "contains" to control which rows appear in your data.

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

Just double click the name of the column and rename it

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

It will close the Power Query page and apply on the transformations you make to the tables

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

Filter Rows

Apply one or more filter conditions to the rows in this table.

☒ Basic ☐ Advanced

Keep rows where 'Quantity'

is less than 1200

☒ And ☐ Or

1200 Enter or select a value...

OK Cancel

Table: Table.TransformColumnTypes(#"Promoted Headers",{{"CustID", Int64.Type}, {"Name", type text}, {"OrderDate", type text}, {"Quantity", Int64.Type}})

CustID	Name	OrderDate	Quantity
101	Alice	1/10/2023	1200
102	Bob	1/10/2023	25
103	Alice	1/10/2023	80
103	Charlie	1/25/2023	300

14. Create a conditional column: Label orders as "High Value" if Price > 100.

7. Split the OrderDate column into separate "Year," "Month," and "Day" columns.

Split Column by Delimiter

Specify the delimiter used to split the text column.

Select or enter delimiter

--Custom--

/

Split at

☐ Left-most delimiter

☐ Right-most delimiter

☒ Each occurrence of the delimiter

Advanced options

Quote Character

"

☐ Split using special characters

Insert special character

OK Cancel

Table: Table.SelectRows(#"Changed Type", each [Quantity] > 100)

CustID	Name	OrderDate	Quantity
101	Alice	1/10/2023	1200
103	Charlie	1/25/2023	300

8. Replace all "Mouse" entries in the Product column with "Computer Mouse."

The screenshot displays the Power Query Editor window. The ribbon at the top includes tabs for File, Home, Transform, Add Column, View, Tools, and Help. The Transform tab is active, showing various data manipulation options. The main area shows a data table with the following columns: OrderDate (split into month, day, year), Product, and Quantity. The table contains two rows of data.

OrderDate	Product	Quantity
2023-01-10	Laptop	1
2023-01-25	Monitor	1

The right-hand pane shows the 'Query Settings' for the 'Orders' query. It includes a 'PROPERTIES' section with the query name and a list of 'APPLIED STEPS' including Source, Promoted Headers, Changed Type, Filtered Rows, Split Column by Delimiter, Changed Type1, and 'Renamed Columns' (which is currently selected).

- Replace all "Mouse" entries in the Product column with "Computer Mouse."

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File Home Insert Modeling View Optimize Help Table tools

File Home Transform Add Column View Tools Help

Group By Use First Row as Headers Count Rows

Table

Queries [4]

- Sales_Data (1)
- YearParam (2025)
- Orders
- Customer_Orders

Table

1	101	Alice			
2	102	Bob			
3	101	Alice			
4	103	Charlie			

Replace Values

Replace one value with another in the selected columns.

Value To Find

Mouse

Replace With

Computer Mouse

Advanced options

OK Cancel

Query Settings

PROPERTIES

Name

Orders

APPLIED STEPS

- Source
- Promoted Headers
- Changed Type

6 COLUMNS, 4 ROWS Column profiling based on top 1000 rows

Page 1 of 1

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File Home Transform Add Column View Tools Help

Group By Use First Row as Headers Count Rows

Table

Queries [4]

- Sales_Data (1)
- YearParam (2025)
- Orders
- Customer_Orders

Table

1	101	Alice	1/10/2023	Laptop	1	1200
2	102	Bob	1/15/2023	Computer Mouse	3	25
3	101	Alice	1/20/2023	Keyboard	2	80
4	103	Charlie	1/25/2023	Monitor	1	300

Table.TransformColumnTypes(#"Promoted Headers",{{"CustID", Int64.Type}, {"Name", type text}, {"OrderDate", type text}, {"Product", type text}, {"Quantity", Int64.Type}, {"Price", Int64.Type}})

Table.ReplaceValue(#"Changed Type", "Mouse", "Computer Mouse", Replacer.ReplaceText, {"Product"})

Query Settings

PROPERTIES

Name

Orders

APPLIED STEPS

- Source
- Promoted Headers
- Changed Type
- Replaced Value

6 COLUMNS, 4 ROWS Column profiling based on top 1000 rows

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9. Sort the table by OrderDate (newest first).

The top screenshot shows the 'Transform' tab with the 'Replaced Value' step applied to the 'Product' column. The formula bar shows: `= Table.ReplaceValue("#Changed Type", "Mouse", "Computer Mouse", Replacer.ReplaceText, {"Product"})`. The data table shows 4 rows with columns: CustID, Name, OrderDate, Product, Quantity, and Price.

CustID	Name	OrderDate	Product	Quantity	Price
1	Sort Ascending		Laptop	1	
2	Sort Descending		Computer Mouse	3	
3	Clear Sort		Keyboard	2	
4	Clear Filter		Monitor	1	

The bottom screenshot shows the 'Sorted Rows' step applied to the 'Replaced Value' step. The formula bar shows: `= Table.Sort("#Replaced Value", {"OrderDate", Order.Descending})`. The data table shows 4 rows with columns: CustID, Name, OrderDate, Product, Quantity, and Price.

CustID	Name	OrderDate	Product	Quantity	Price
1	103 Charlie	1/25/2023	Monitor	1	
2	101 Alice	1/20/2023	Keyboard	2	
3	102 Bob	1/15/2023	Computer Mouse	3	
4	101 Alice	1/10/2023	Laptop	1	

10. How would you handle null values in the Price column?

I will replace null to 0, or I can remove null values, it depends on what is asked

11. Write custom M-code to add a column calculating TotalSpent = Quantity * Price.

AutoSave OFF | File Home Insert Draw Design Layout References Mailings Review View Help | Search

Clipboard | Column From Custom Examples | Column | Invoke Custom Function | Add Column | View | Tools | Help

Queries [4] | Sales_Data (1) | YearParam (2025) | Orders | Customer_Orders

1 101 Charlie
2 101 Alice
3 102 Bob
4 101 Alice

Custom Column

Add a column that is computed from the other columns.

New column name: TotalSpent

Custom column formula: = [Quantity]*[Price]

Available columns: CustID, Name, OrderDate, Product, Quantity, Price

<< Insert

Learn about Power Query formulas

✓ No syntax errors have been detected.

OK Cancel

Query Settings

PROPERTIES

Name: Orders

APPLIED STEPS

Source, Promoted Headers, Changed Type, Replaced Value, Sorted Rows

6 COLUMNS, 4 ROWS | Column profiling based on top 1000 rows | Preview downloaded at 1:04 PM

Page 5 of 6 | 307 words | English (United States) | Accessibility: Investigate | Focus | 100%

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Column From Custom Invoke Custom Examples | Column | Function | Duplicate Column | Merge Columns | Extract | Parse | Statistics | Standard Scientific | Information | Trigonometry | Rounding | Date | Time | Duration | Text | Vision | Azure Machine Learning | AI Insights

Queries [4] | Sales_Data (1) | YearParam (2025) | Orders | Customer_Orders

OrderDate | Product | Quantity | Price | TotalSpent

1	1/25/2023	Monitor	1	300	300
2	1/20/2023	Keyboard	2	80	160
3	1/15/2023	Computer Mouse	3	25	75
4	1/10/2023	Laptop	1	1200	1200

7 COLUMNS, 4 ROWS | Column profiling based on top 1000 rows | Preview downloaded at 1:10 PM

12. Group the table by CustID to show total spending per customer.

The top screenshot shows the Power Query Editor with the 'Group By' dialog box open. The dialog box has 'CustID' selected in the 'Group By' dropdown. The 'New column name' is 'spendingPerCustomer', the 'Operation' is 'Sum', and the 'Column' is 'TotalSpent'. The 'Basic' radio button is selected.

The bottom screenshot shows the resulting query with columns 'CustID', 'spendingPerCustomer', and 'TotalSpent'. The 'Applied Steps' list on the right includes 'Grouped Rows'.

13. Fix inconsistent date formats (e.g., 01/10/2023 vs. 2023-01-10) in OrderDate.

In Power Query, select the OrderDate column → go to the Transform tab → click Data Type → choose Date.

14. Create a conditional column: Label orders as "High Value" if Price > 100.

15. Optimize the query to reduce refresh time (e.g., remove unused columns early).

The screenshot shows the Power BI Desktop interface. The 'Add Conditional Column' dialog box is open, showing the configuration for a new column named 'Values'. The condition is 'Price' is greater than 100, resulting in 'High Value', and otherwise 'Low Value'. The background shows a data table with columns: Product, Quantity, Price, TotalSpent, and Values. The 'Values' column contains 'High Value' for rows where Price is greater than 100, and 'Low Value' otherwise.

Product	Quantity	Price	TotalSpent	Values
1/25/2023 Monitor	1	300	300	High Value
1/20/2023 Keyboard	2	80	160	Low Value
1/15/2023 Computer Mouse	3	25	75	Low Value
1/10/2023 Laptop	1	1200	1200	High Value

15. Optimize the query to reduce refresh time (e.g., remove unused columns early).

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FileHomeTransformAdd ColumnViewToolsHelp

Close & ApplyCloseNew SourceRecent SourcesEnter DataData source settingsData SourcesManage ParametersRefresh PreviewAdvanced EditorManageQueryChoose ColumnsRemove ColumnsKeep RowsRemove RowsSplit ColumnGroup ByData Type: Whole NumberUse First Row as HeadersReplace ValuesMerge QueriesAppend QueriesCombine FilesText AnalyticsVisionAzure Machine LearningAI Insights

Remove Other Columns

Queries [4]

Sales_Data (1)YearParam (2025)OrdersCustomer_Orders

Table.AddColumn("#Added Custom", "Values", each x => x > 100 then "High Value" else "Low Value")

	i2 CustID	A2 Name	OrderDate	A2 Product	i2 Quantity	i2 Price
1	103	Charlie	1/25/2023	Monitor	1	
2	101	Alice	1/20/2023	Keyboard	2	
3	102	Bob	1/15/2023	Computer Mouse	3	
4	101	Alice	1/10/2023	Laptop	1	

Query Settings

PROPERTIES

NameOrdersAll Properties

APPLIED STEPS

SourcePromoted HeadersChanged TypeReplaced ValueSorted RowsAdded CustomAdded Conditional Column

8 COLUMNS, 4 ROWSColumn profiling based on top 1000 rowsPREVIEW DOWNLOADED AT 1:27 PM