POWER BI CHEAT SHEET

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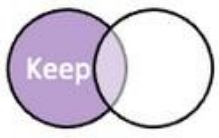
The Merge Guide for the Power Query Editor

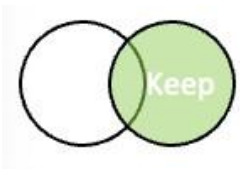
Left Outer



What it selects:
All rows from the left table, matching rows from the right table

Example:
Suppose you have a table of customers and a table of orders. A left outer join would return all customers and their associated orders, including those customers who have not placed any orders.

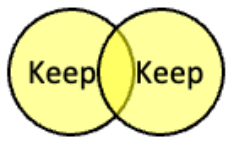
Right Outer



What it selects:
All rows from the right table, matching rows from the left table

Example:
Continuing with the customer and orders example, a right outer join would return all orders and their associated customers, including those orders that are not linked to any customers.

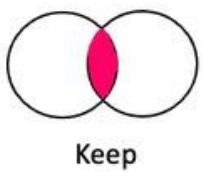
Full Outer



What it selects:
All rows from both tables

Example:
In the context of customer and orders, a full outer join would return all customers and their orders, as well as all orders and their associated customers. It includes all rows from both tables, filling in with null values where there is no match

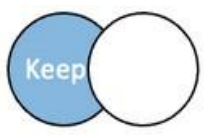
Inner



What it selects:
Only matching rows from both tables

Example:
If you only want to retrieve rows where there is a match in both tables, you would use an inner join. For example, if you want to get a list of customers who have placed orders, you would use an inner join between the customers and orders tables.

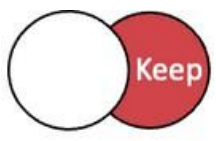
Left Anti



What it selects:
Only rows from the left table.

Example:
An anti join is used to find records in the left table for which there is no corresponding match in the right table. For example, if you want to find customers who have not placed any orders, you would use a left anti join between the customers and orders tables..

Right Anti



What it selects:
Only rows from the right table.

Example:
Similar to the left anti join, a right anti join is used to find records in the right table for which there is no corresponding match in the left table. For instance, finding orders that have no associated customers.

You can use fuzzy merge to apply fuzzy matching algorithms when comparing columns!

Power BI Data Types

Decimal Number

Example:
2319.99

Use Case:
Average Product Price

Fixed Decimal Number

Example:
2,319.99

Use Case:
Currency Values

Whole Number

Example:
2320

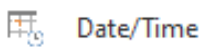
Use Case:
Number of Units Sold

Percentage

Example:
231999.00%

Use Case:
Market Share Percentage

Date/Time



Example:
1/1/2005 12:00:00 AM

Use Case:
Timestamp of Customer Purchases

Date

Example:
1/1/2005

Use Case:
Sales Date

Time

Example:
12:00:00 AM

Use Case:
Duration of a customer support call

Date/Time/Timezone

Example:
1/1/2005 12:00:00 AM -05:00

Use Case:
Timestamps with varied Timezones

Duration

Example:
Years/Months/Days/ Hours/ Minutes/ Seconds

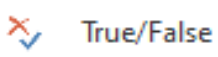
Use Case:
Time taken for a manufacturing process

Text

Example:
Atlas

Use Case:
Product Names

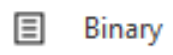
True/False



Example:
TRUE / FALSE

Use Case:
Purchase Status, TRUE if customer made a purchase, FALSE if not.

Binary



Example:
BINARY

Use Case:
Only for Legacy purposes. If you try to load binary columns into Power BI, you might run into errors.

Any

Example:
???

Use Case:
The status given to a column that doesn't have an explicit data type definition.

Power BI Visuals

Comparison

Highlight relative differences and similarities between data points.

Use Case:
Compare monthly sales performance between different products using a column chart to identify top-performing items.

- Stacked Bar Chart
- Clustered Bar/ Column Chart
- 100% Stacked Bar Chart
- Scatter Plot

Trends

The Merge Guide for the Power Query Editor

Use Case:
Analyze quarterly revenue trends using a line chart to identify growth or decline patterns over time.

- Line
- Stacked Column Chart
- Line and Stacked Column Chart

Status

Conveys the current state or performance of a metric.

Use Case:
Display the current sales performance against the target using a gauge visual for a quick status check.

- Card
- Gauge
- KPI
- Multi-Row Card
- Card (new)
- Metrics (Preview)

Geographic Location

Represents data spatially, showing patterns across regions.

Use Case:
Analyze regional sales performance using a filled map to identify high and low-performing areas.

- Map
- Filled Map
- Shape Map
- Azure Map
- ArcGIS Maps

Parts-of-a-Whole

Illustrates how individual components contribute to the whole.

Use Case:
Visualize the percentage distribution of product categories in total sales using a treemap.

- Pie Chart
- Treemap
- Area Chart
- Stacked Area Chart
- Ribbon
- Donut Chart
- 100% Stacked Column Chart

Tabular

Presents data in a structured, row-and-column format for detailed information.

Use Case:
Display detailed information about employee performance, such as sales figures and targets, using a table visual.

- Table
- Matrix

Flow

Visualizes the flow or progression of data or processes.

Use Case:
Visualize the workflow of a sales process using a flowchart to understand the stages and bottlenecks.

- Waterfall
- Funnel

Filters

Enables interactive control to refine displayed data.

Use Case:
Allow users to dynamically explore sales data by product category using slicers for interactive filtering.

- Slicer
- Slicer (New)

Artificial Intelligence

Leverages A.I for automated insights, predictions, or recommendations

Use Case:
Implement sentiment analysis on customer feedback using an AI-powered visual to identify positive and negative sentiments.

- Q&A
- Smart Narrative
- Key Influencers
- Decomposition Tree