

Making Powerful Data Transformations

Make the data fit your purpose



Graphical User Interface

Home tab

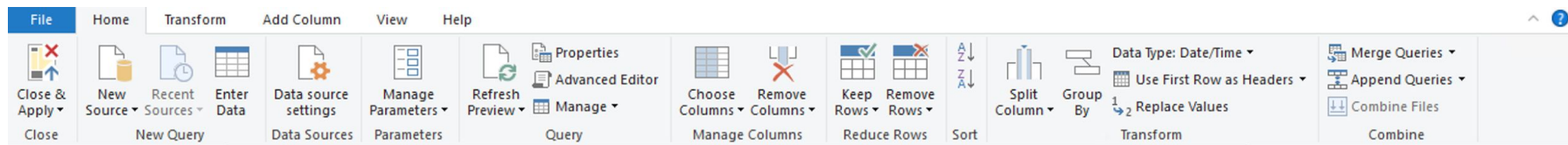
Transform tab

Add Column tab

View tab



Home tab



Close

New Query

Data Sources

Parameters

Query

Manage Columns

Reduce Rows

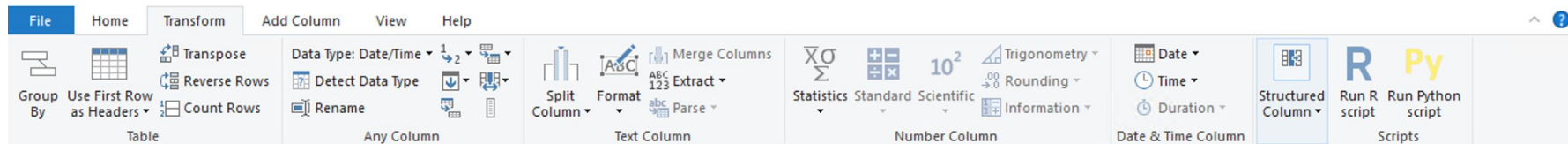
Sort

Transform

Combine



Transform tab



Table

Any Column

Text Column

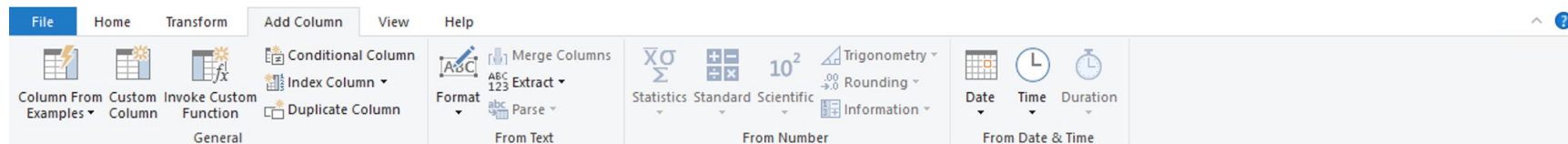
Number Column

Date & Time Column

Scripts



Add Column tab



General

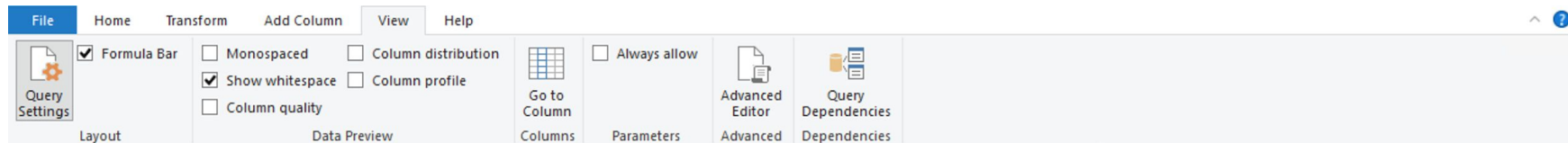
From Text

From Number

From Date & Time



View tab



Layout

Data Preview

Columns

Parameters

Advanced

Dependencies



Table Transforms

Merge Queries

Append Queries

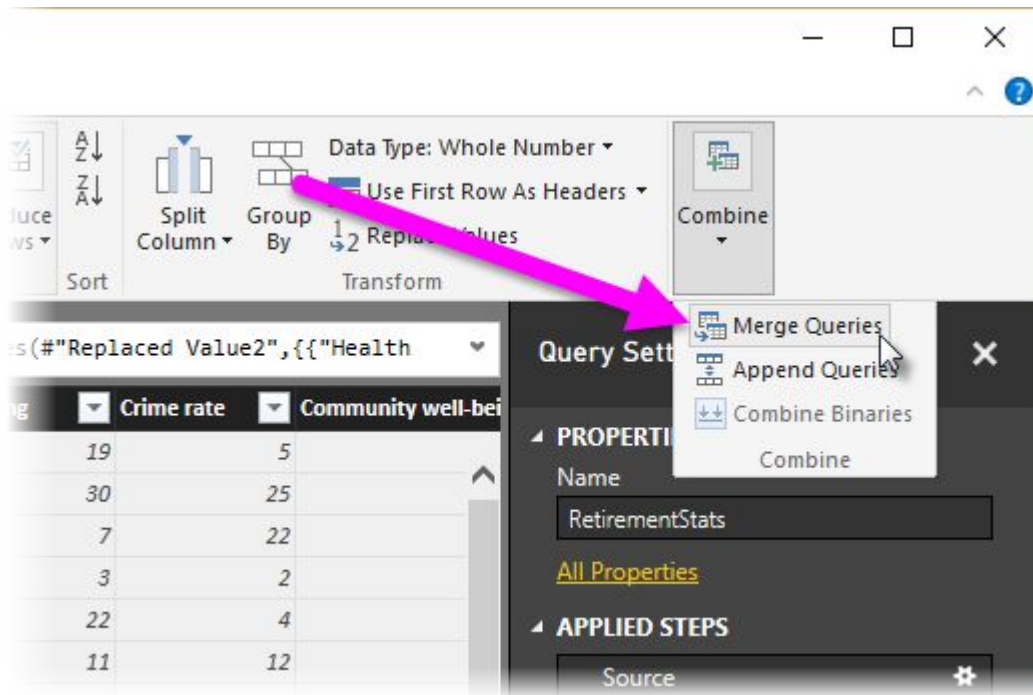
Combine Files



Merge

Relates 2 tables on a column

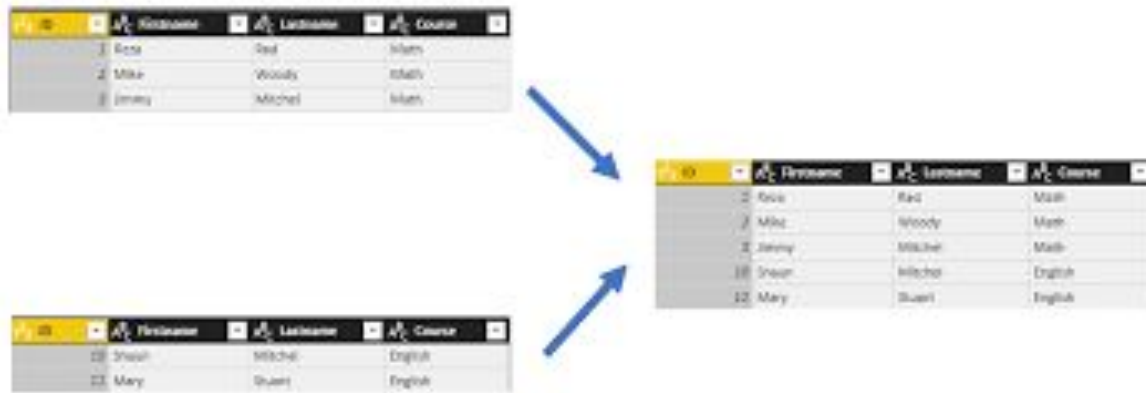
Like using a LEFT OUTER JOIN in SQL.



Append

Combine 2 sets of data

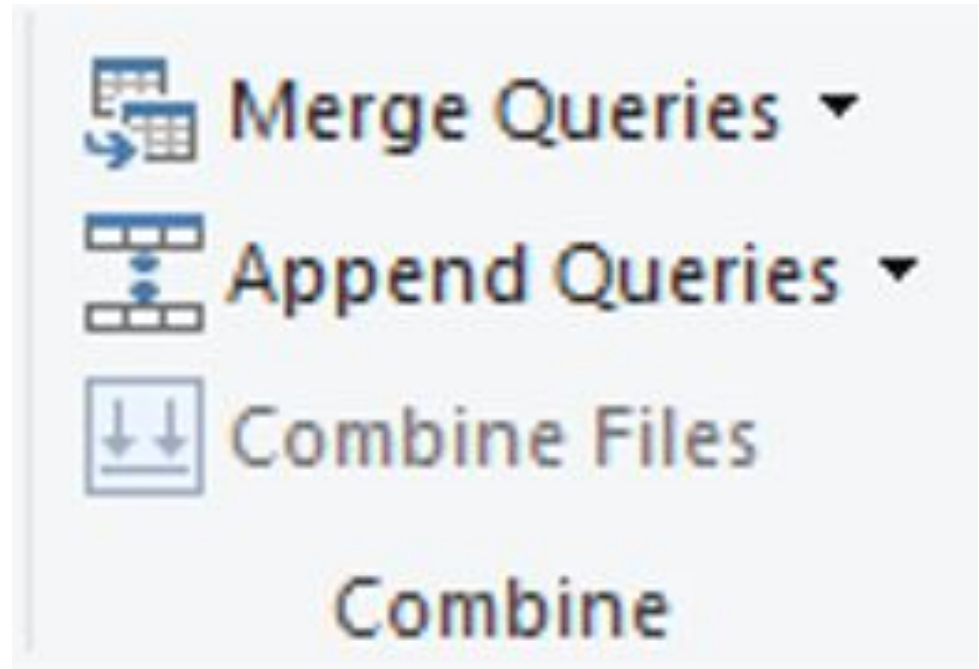
Like using UNION in SQL



Combine Files

Combine 2+ files

Like copying the text from
one file into another



Data Types

Table

Record

List

DateTime

Text

Number

Boolean



Convert Columns into Data Types

- **Table**
Items with rows and columns
- **Record**
Items with key value pairs
- **List**
Array of items
- **Datetime**
Year, Month, Day, Hours, Minutes, Seconds, Milliseconds
- **Text**
Names, descriptions, categories
- **Number**
Digits, decimals, currencies
- **Boolean**
true/false



Calculated & Measured Columns

What is the difference?

Calculated Columns

Measured Columns

When to use each

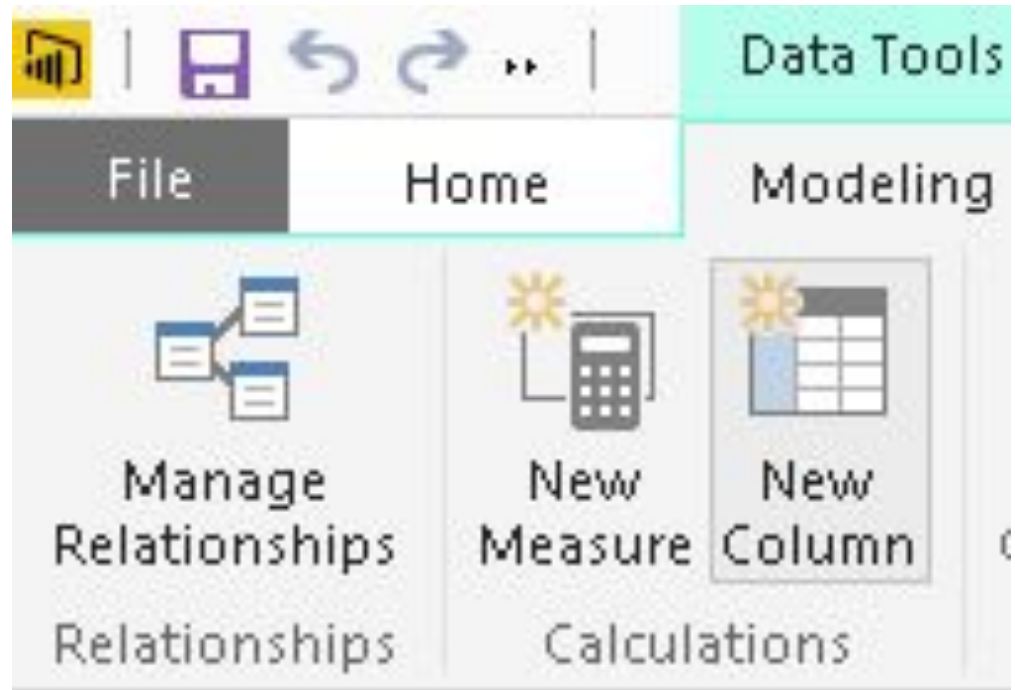


Calculated Columns

Only uses data from current row to “calculate” value.

Calculated at query time

Stored in Data Model



Measured Columns

Use data from any or all rows to create value

Aggregate of other data

Unit Cost	Quantity	Unit Price	SalesAmount	TotalProductCost	GrossMargin	GrossMarginPct
3.00	1	8.000	8.00	3.00	5.00	63 %
3.00	2	7.500	15.00	6.00	9.00	60 %
3.00	3	7.200	21.60	9.00	12.60	58 %
3.00	4	6.800	27.20	12.00	15.20	56 %
2.50	5	7.000	35.00	12.50	22.50	64 %
2.50	6	5.300	31.80	15.00	16.80	53 %
2.50	7	5.400	37.80	17.50	20.30	54 %
2.50	8	5.100	40.80	20.00	20.80	51 %
2.50	9	5.100	45.90	22.50	23.40	51 %
2.90	8	5.000	40.00	23.20	16.80	42 %



When to use each

Use data from any or all rows to create value

Aggregate of other data



When to use each

Use Calculated to:

Use a slicer

Pivot table

Define an expression that is bound to the current row.

Categorize text or numbers

Use Measured to:

Calculate percentage on a selection of rows

Calculate ratios of data



Functions

Text Functions

Mathematical Functions

Datetime Functions



Text Functions

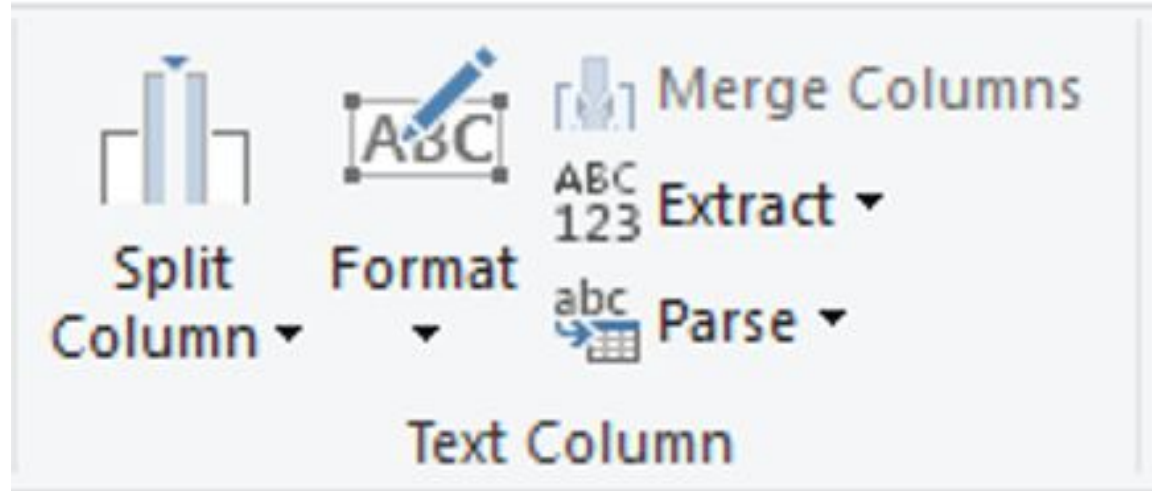
Split columns

Format

Merge Columns

Extract

Parse



Number Functions

Statistics

Standard

Scientific

Trigonometry

Rounding

Information



Data & Time Functions

Date

Time

Duration

