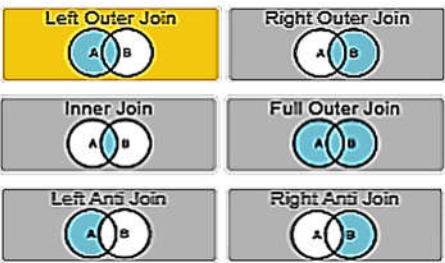


## [Power Query] for Report Automation – Revision Notes by [www.yodalearning.com]

Note 1: For 2010 & 2013, download as Add-in (32 vs 64 bit); for 2016 Professional – it's under Data > Get & Transform; for Power BI – Home tab > Edit Queries

Note 2: PQ = Case Sensitive; File Source Name is not dynamic \*\*\*

1	Import Data from a "Folder" (CSV and XLSX)
2	Import Data from the "Web" (e.g. AMFI India - MF NAVs – NAV.txt) + Refresh
3	Filter & Sort
4	Applied Steps = ~Undo; See the Steps' results
5	Home – Merge Queries [horizontal] i.e. add more columns sideways (~VLOOKUP or INDEX) Home – Append Queries [vertical] i.e. add more rows below (~copy paste data below)
6	Queries – "Duplicate" to create multi sub-branches, "Rename" for better identification & reference
7	Home – Remove Rows (Duplicates, Blanks)
8	Transform – Use first row as headers, Fill Down, Split Column, Replace Values, Extract*, Format* (TRIM, CLEAN, Case Change)
9	Transform – Unpivot Columns to convert cross-tab to flat file (~semi-transpose)
10	Transform – Transpose Columns
11	Transform – Pivot Column (flat file to cross tab)
12	Transform – Data Type (~Right Click - Format cells)
13	Transform – Group By (~SUMIFS or COUNTIFS or Pivot Table summarization)
14	Add Column – Column from Examples using Programming by Example or PBE (~FlashFill)
15	Add Column – Custom Columns (~new column with a formula)
16	Add Column – Conditional Columns (~IF) with AND / OR
17	Add Column – Index Column (~Serial Number)
18	Right-click on Query > Load to > [Connection] + [Add this data to Data Model] >>> Insert Pivot Table with source as "Connection" button
19	<p>JOIN Types in Merge Queries - e.g. [Invited vs Present in an Event] OR [Own Catalog vs Phy. Stock] OR [Popular Products vs Out of Stock]:</p>  <p>Left Outer (all from first, matching from second) Right Outer (all from second, matching from first) Full Outer (all rows from both) Inner (only matching rows) Left Anti (rows only in first) Right Anti (rows only in second)</p>
20	Trick to get List of all <b>M-Query</b> commands: New Query > Other Sources > Blank Query > <b>=#shared</b> > Convert into Table
21	

\* also present in the ADD COLUMN tab

## [Power BI Desktop] – Revision Notes by [www.yodalearning.com]

1	UI of Left-side Panel: <i>Report</i> (Visual Dashboard) – <i>Data</i> (Table) – <i>Relationships</i> (between Tables)
2	UI of Right-side Panel: Filter, Visualization, Fields
3	Table: DIM (Lookup or Master Table), FACT (Transaction Table)
4	Relationship (One to Many) > DIM (unique IDs) to FACT > DAX: RELATED (~VLOOKUP)
5	Modeling tab – New Measure, New Column, New Table
6	Calculated Columns (~ Formula-based columns / Row by Row Evaluation)
7	Measures: Implicit Measures (Drag-n-Drop existing fields) vs. Explicit Measures (written in DAX)
8	Evaluation Context = [Filter + Row] Context - - - Dynamic Aggregation
9	Date Table > List of Unique Dates > Needed for Date & Time Intelligence DAX functions //CALENDAR & DATE DAX
10	DAX: CALENDAR(<start_date>, <end_date>); DATE
11	DAX: CALCULATE(<expression>, <filter1>, <filter2>...); FILTER
12	DAX: DATEADD(<dates>, <number_of_intervals>, <interval>)
13	DAX: DIVIDE(<numerator>, <denominator> [, <alternateresult>]) used for % calculations (~ IFERROR)
14	DAX: DISTINCTCOUNT ~ Unique Count
15	DAX: COUNTROWS ~ No. of Transactions
16	DAX: RELATED ~ VLookup (* relationship should exist)
17	DAX: DISTINCT - Create Table of Unique values ~ Remove Duplicates
18	Advanced DAX: ALL, ALLSELECTED, DATESINPERIOD, MAX, LASTDATE, FIRSTDATE, SUMMARIZE, TOTALYTD, SAMEPERIODLASTYEAR, FILTER

### VISUALS

19	Visuals Level #1: Card, Table, Conditional Formatting, Slicer, Pie, Doughnut, Treemap, Clustered Column (or Bar), Line & Clustered Column, Ribbon, Tooltips
20	Visuals Level #2: Maps, Gauge, Scatter, Map (Bing, Filled, Shape), Stacked, Area; <b>***Analytics Features (trend, forecast)</b>
21	Visuals Level #3: Scatter Bubbles with Time movement, KPI card, Funnel, Waterfall, Custom
22	Visuals Level #4: Right click on a visual part & Analyze ~ auto-insights
23	Visuals Level #5: On Hover Visuals = Page Information & Page Size (Tooltip) + View > Page View > Actual Size
24	Ask a Question (Natural Language) - just type what you want with specific key terms
25	Edit Report Interactions (Select Controller vs Controlled)
26	Filter level: Visual < Page < Report
27	Drillthrough (Sub-groups)
28	Keep Slicer Items always visible – make a Table using DISTINCT + Table Relationship
29	Others: Binning (Group), Preview Features (Read data from PDF, Column Profiling, Date Table hierarchy, Fuzzy Merge), TOP N filter, Rupee Symbol (Gujarati)