Power BI :
The Foundations of 'M'

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Class Information

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M

Basics of M
Data Cleansing with M

M Basics

What is M?

Why M?

Understanding M syntax

Using M Query Formulas

What is M Query?

'M' is for Mashup

M is easily made dynamic

Why M Query? Data Transformations

Pivot/Unpivot

Removing unwanted characters

Splitting columns

Query editor is just a UI that generates M

M Query Fundamentals

Where to Write M

Query Editor formula bar

View > Advanced Editor

M Query Results

Can produce a single value, list (array), table, function

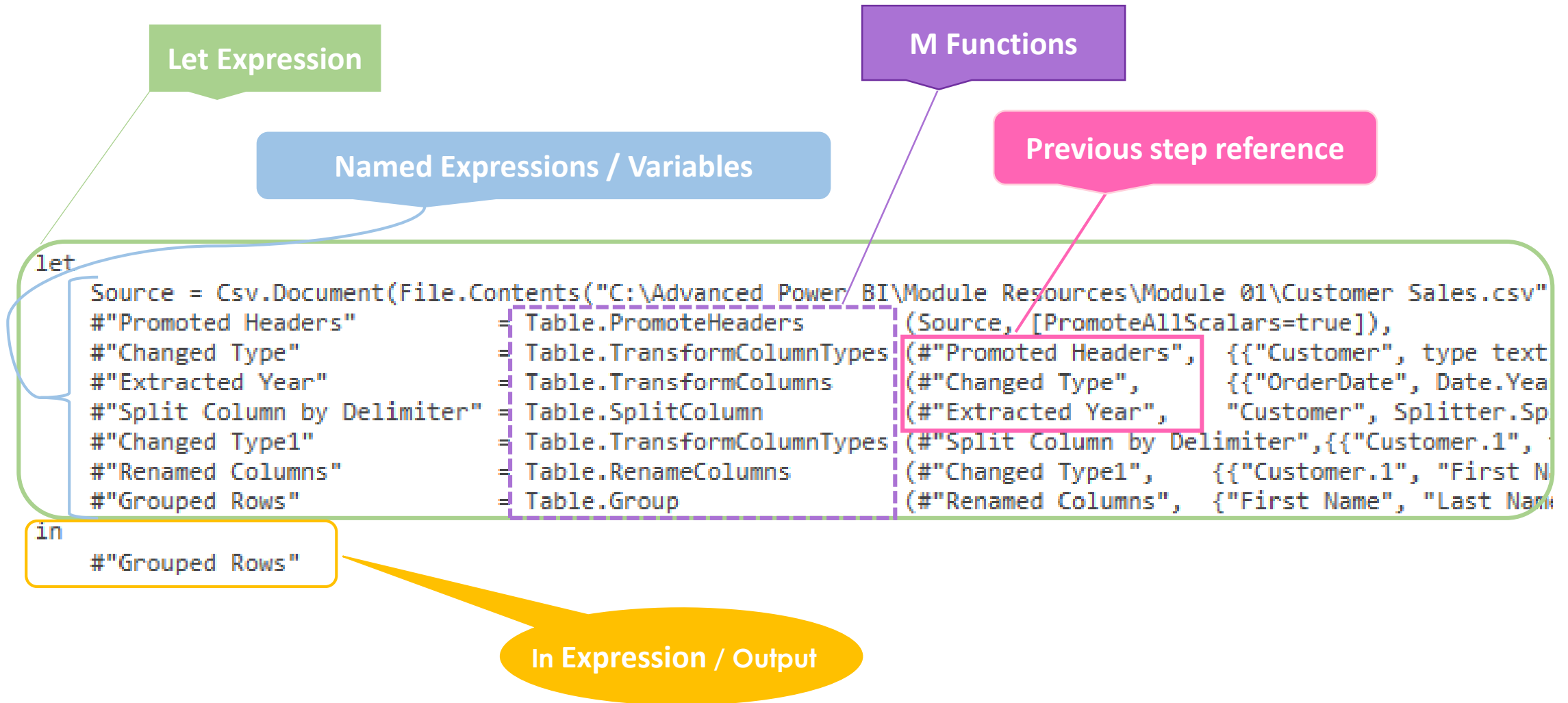Can be copied and pasted to other workbooks but not the best sharing method

M Query Tips

Case sensitive!

Use #shared to return Library Functions

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Taking a look at M code

Let Expression

Named Expressions / Variables

M Functions

Previous step reference

```
let
    Source = Csv.Document(File.Contents("C:\Advanced Power BI\Module Resources\Module 01\Customer Sales.csv"
    #"Promoted Headers"        = Table.PromoteHeaders        (Source, [PromoteAllScalars=true]),
    #"Changed Type"            = Table.TransformColumnTypes  (#"Promoted Headers",   {{"Customer", type text
    #"Extracted Year"          = Table.TransformColumns      (#"Changed Type",       {{"OrderDate", Date.Yea
    #"Split Column by Delimiter" = Table.SplitColumn         (#"Extracted Year",      "Customer", Splitter.Sp
    #"Changed Type1"           = Table.TransformColumnTypes  (#"Split Column by Delimiter",{{"Customer.1",
    #"Renamed Columns"         = Table.RenameColumns         (#"Changed Type1",      {{"Customer.1", "First N
    #"Grouped Rows"            = Table.Group                 (#"Renamed Columns",   {"First Name", "Last Nam
in
    #"Grouped Rows"
```

In Expression / Output

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M Query Basics

#shared

Available M Functions

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#shared

DEMO

#shared

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M Query Basics

M Query Basics

Type	Syntax	Description
Record	[X = 1] or [X =1, Y=2]	
List	{1,2,3} or {"A", "B"} or {1..10}	
Table	#table({"Col1", "Col2"}, {{1,2}, {2,1})	#table({List of Columns}, {{List of Records}}
Function	(a) =>	
Duration	#duration(0,0,0,0)	#duration(days,hours,minutes, seconds)
Date	#date(2017, 8, 30)	#date(year, month, day)
Time	#time(12,18,0)	#time(hour, minute, second)

M Query Basics

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