

Power BI –

M-Query or Power Query

***Agenda***

* Text Column
* Number Column
* Any Column
* Creating Custom Columns

**Text Column:**

1. Duplicated Column = = Table.DuplicateColumn(#"Changed Type", "Customer Name", "Customer Name - Copy")
2. Split Column by Delimiter = Table.SplitColumn(#"Duplicated Column", "Customer Name - Copy", Splitter.SplitTextByEachDelimiter({" "}, QuoteStyle.Csv, true), {"Customer Name - Copy.1", "Customer Name - Copy.2"})
3. Changed Type1 = Table.TransformColumnTypes(#"Split Column by Delimiter",{{"Customer Name - Copy.1", type text}, {"Customer Name - Copy.2", type text}})
4. Renamed Columns = Table.RenameColumns(#"Changed Type1",{{"Customer Name - Copy.1", "First\_name"}, {"Customer Name - Copy.2", "Last\_name"}})
5. Lowercased Text = Table.TransformColumns(#"Duplicated Column1",{{"Order Priority - Copy", Text.Lower, type text}})
6. Uppercased Text = Table.TransformColumns(#"Duplicated Column2",{{"Order Priority - Copy", Text.Upper, type text}})
7. Capitalized Each Word = Table.TransformColumns(#"Duplicated Column3",{{"Lowercase - Copy", Text.Proper, type text}})
8. Added Prefix = Table.TransformColumns(#"Duplicated Column4", {{"Ship Mode - Copy", each "Mode-" & \_, type text}})
9. Added Suffix = Table.TransformColumns(#"Duplicated Column5", {{"Ship Mode - Copy", each \_ & "-Mode", type text}})
10. Calculated Text Length = = Table.TransformColumns(#"Duplicated Column6",{{"City - Copy", Text.Length, Int64.Type}})
11. Extracted First Characters = Table.TransformColumns(#"Duplicated Column7", {{"Customer Name - Copy", each Text.Start(\_, 4), type text}})
12. Extracted Last Characters = Table.TransformColumns(#"Duplicated Column8", {{"Customer Name - Copy", each Text.End(\_, 5), type text}})
13. Extracted Text Range = Table.TransformColumns(#"Duplicated Column9", {{"State or Province - Copy", each Text.Middle(\_, 3, 7), type text}})
14. Extracted Text Before Delimiter = Table.TransformColumns(#"Duplicated Column10", {{"Product Sub-Category - Copy", each Text.BeforeDelimiter(\_, " "), type text}})
15. Extracted Text After Delimiter = Table.TransformColumns(#"Duplicated Column11", {{"Product Sub-Category - Copy", each Text.AfterDelimiter(\_, " "), type text}})
16. Extracted Text Between Delimiters = Table.TransformColumns(#"Duplicated Column12", {{"Product Sub-Category - Copy", each Text.BetweenDelimiters(\_, " ", " "), type text}})

**Number Column:**

1. Added to Column = Table.TransformColumns(#"Duplicated Column13", {{"Quantity ordered new - Copy", each \_ + 10, type number}})
2. Multiplied Column = Table.TransformColumns(#"Duplicated Column14", {{"Quantity ordered new - Copy", each \_ \* 5, type number}})
3. Subtracted from Column = Table.TransformColumns(#"Duplicated Column15", {{"Quantity ordered new - Copy", each \_ - 10, type number}})
4. Divided Column = Table.TransformColumns(#"Duplicated Column16", {{"Quantity ordered new - Copy", each \_ / 5, type number}})
5. Integer-Divided Column = Table.TransformColumns(#"Duplicated Column17", {{"Sales - Copy", each Number.IntegerDivide(\_, 10), Int64.Type}})
6. Calculated Modulo = Table.TransformColumns(#"Duplicated Column18", {{"Sales - Copy", each Number.Mod(\_, 10), type number}})
7. Calculated Percentage = Table.TransformColumns(#"Duplicated Column19", {{"Sales - Copy", each \_ \* 30 / 100, type number}})
8. Calculated Absolute Value = Table.TransformColumns(#"Duplicated Column20",{{"Profit - Copy", Number.Abs, type number}})
9. Calculated Power = Table.TransformColumns(#"Duplicated Column21",{{"Quantity ordered new - Copy", each Number.Power(\_, 4), Int64.Type}})
10. Calculated Square Root = Table.TransformColumns(#"Duplicated Column22",{{"Quantity ordered new - Copy", Number.Sqrt, type number}})
11. Calculated Exponent = Table.TransformColumns(#"Duplicated Column23",{{"Unit Price - Copy", Number.Exp, type number}})
12. Calculated Natural Logarithm = Table.TransformColumns(#"Duplicated Column24",{{"Unit Price - Copy", Number.Ln, type number}})
13. Calculated Factorial = Table.TransformColumns(#"Duplicated Column25",{{"Quantity ordered new - Copy", Number.Factorial, Int64.Type}})
14. Rounded Up = Table.TransformColumns(#"Duplicated Column26",{{"Profit - Copy", Number.RoundUp, Int64.Type}})
15. Rounded Down = Table.TransformColumns(#"Duplicated Column27",{{"Shipping Cost - Copy", Number.RoundDown, Int64.Type}})
16. Rounded Off = Table.TransformColumns(#"Duplicated Column28",{{"Sales - Copy", each Number.Round(\_, 0), type number}})
17. Checked Is Even = Table.TransformColumns(#"Duplicated Column29",{{"Profit - Copy", Number.IsEven, type logical}})
18. Checked Is Odd = Table.TransformColumns(#"Duplicated Column30",{{"Quantity ordered new - Copy", Number.IsOdd, type logical}})
19. Extracted Sign = Table.TransformColumns(#"Duplicated Column31",{{"Profit - Copy", Number.Sign, Int64.Type}})

**Date & Time Column:**

1. Extracted Year = Table.TransformColumns(#"Duplicated Column32",{{"Order Date - Copy", Date.Year, Int64.Type}})
2. Extracted Month = Table.TransformColumns(#"Duplicated Column33",{{"Order Date - Copy", Date.Month, Int64.Type}})
3. Extracted Month Name = Table.TransformColumns(#"Duplicated Column34", {{"Order Date - Copy", each Date.MonthName(\_), type text}})
4. Calculated Quarter = Table.TransformColumns(#"Duplicated Column35",{{"Order Date - Copy", Date.QuarterOfYear, Int64.Type}})
5. Calculated Week of Year = Table.TransformColumns(#"Duplicated Column36",{{"Ship Date - Copy", Date.WeekOfYear, Int64.Type}})
6. Extracted Day = Table.TransformColumns(#"Duplicated Column37",{{"Ship Date - Copy", Date.Day, Int64.Type}})
7. Extracted Day Name = Table.TransformColumns(#"Duplicated Column38", {{"Ship Date - Copy", each Date.DayOfWeekName(\_), type text}})

**Any Column:**

1. Replaced Value = Table.ReplaceValue(#"Duplicated Column39","Not Specified","No",Replacer.ReplaceText,{"Order Priority - Copy"})
2. Changed Type2 = Table.TransformColumnTypes(#"Duplicated Column40",{{"Row ID - Copy", type text}})
3. Renamed Columns39 = Table.RenameColumns(#"Changed Type2",{{"Row ID - Copy", "text\_type"}})

**Custom Columns:**

1. Create a "Profit Category" column based on profit values.

Profit Category =

if [Profit] >= 1000 then "High Profit"

else if [Profit] >= 100 then "Medium Profit"

else "Low Profit"

1. Total Price= Table.AddColumn(#"Added Custom3", "Total Price", each [Unit Price] \* [Quantity ordered new])
2. Calculate the "Profit Margin" as a percentage of profit to sales.

Profit Margin (%) = [Profit] / [Sales] \* 100

1. Create a "Total Cost" column by calculating the sum of "Unit Price" and "Shipping Cost".

Total Cost = Table.AddColumn(#"Added Custom2", "Total Cost", each [Unit Price] + [Shipping Cost])

1. Add a "Full Name" column by combining "Region" and "Manager" with a custom separator.

[Region] & " - " & [Manager]

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