Data Analysis eXpression (DAX)

1. **SUM**

Use to add column values in a table

Syntax

**“Total number of unit sold = sum (`table` [column])”**

1. **Count Function**

Use to count the rows

Syntax

**“Count function = COUNT (`table` [column])”**

1. **DISTINCT COUNT**

Function is use to count DISTINCT values

Syntax

**“DICTINCT function = DISTINCTCOUNT (‘table` (column)”**

1. **CONCATENATE**

Function is use to concatenate to value in a column

Syntax

**“New column name = [col 1] & "-" & [col 2]”**

1. **AVERAGE**

Returns the average (arithmetic mean) of all the numbers in a column.

Syntax

**“AVERAGE (table name [column name])”**

1. **DISTINCTCOUNT**

Counts the number of distinct values in a column.

Syntax

**“DISTINCTCOUNT (<column>)”**

1. **MAX**

Function is use to return MAX values form the tables

Syntax

**“MAX (table name [column name])”**

1. **MIN**

Function is use to return MIN values form the tables

Syntax

**“MIN (table name [column name])”**

1. **Previous year sales**

Function is used to calculate previous year sales

Syntax

**“Prev Year sales = CALCULATE (SUM ([Profit]), SAMEPERIODLASTYEAR (Orders [Date]. [Date]))”**

1. **SUMX**

Function is used when you have to do CALCULATION row by row to use iterator SUMX/AVERAGEX:

Syntax

**“SUMX (‘table name, 'table name'[column] \* 'table name'[column])”**

**IF condition**

1. IF HAVEONEVALUE

Function return result on the logic base

Syntax

**“IF (HAVEONEVALUE (‘table name’ [column]), [expression1], [expression2]) “**

1. **DIVIDE**

Syntax

**“ “**

1. **SamePeriodLastyear**

**Syntax**

Function name = CALCULATE ('tb name'[col name], SAMEPERIODLASTYEAR ('tb name'[date col name]. [Date]))

1. **RANKX**

**Syntax**

RANK bonus\_pct = RANKX (

1. **Filter Date**

**Syntax**

FILTER DATE = CALENDAR ("28/8/1993","16/2/1995")

1. Customer Count

**Syntax**

Customer Count = DISTINCTCOUNT (Customer [Customer Key])

1. TOTAL SALESAMOUNT

**Syntax**

TOTAL SALESAMOUNT = SUM ('Internet Sales'[Sales Amount])

1. Total Cost

**Syntax**

Total Cost = SUM ('Internet Sales'[Product Standard Cost])

1. Divide function handle 0 occurrence otherwise / don’t consider 0 occurrence
2. Profit

**Syntax**

Profit= [totalcostt]-[totalsalesamount]

1. **Profit Margin**

**Syntax**

Profit Margin=divide (profit, totalsalesamount,"0")

**22. Calculate Total salary for each country**

**Syntax**

Total salary for each country = CALCULATE ([TOTAL SALESAMOUNT], ALL ('Sales Territory'[Sales Territory Country]))

**ISBLANK ()**

1. ISBLANK Function

Syntax

Total sale for each country = IF (ISBLANK ([TOTAL SALESAMOUNT]), BLANK (), CALCULATE ([TOTAL SALESAMOUNT], ALL ('Sales Territory'[Sales Territory Country])))

1. Calculate salary

Syntax

ca sale = CALCULATE ([TOTAL SALESAMOUNT],'Sales Territory'[Sales Territory Country] ="country\_name")

New Format Date

Syntax

New Format Date = FORMAT('Date'[Date],"MMM-YYYY")

Last Date of Order

Syntax

Last Date of Order = FORMAT(MAXX(RELATEDTABLE('Internet Sales'),'Internet Sales'[Order Date]),"DD-MMM-YYYY")

**LOGICAL OPERATOR**

AND OR

1. Calculate using AND logical operator

Syntax

ca sale & FRANCE = CALCULATE ([TOTAL SALESAMOUNT],'Sales Territory'[Sales Territory Country] =" country\_name " || 'Sales Territory'[Sales Territory Country] =" country\_name 2")

1. Calculate using concatenate function

Syntax

ca sale & FRANCE = CALCULATE ([TOTAL SALESAMOUNT],'Sales Territory'[Sales Territory Country] in {" country\_name ", " country\_name 2"}

**USE of Variables** in power bi

sales price % difference from manufacturing price=

Var \_baseline\_value=sum ('financials'[manufacturing price])

var \_value\_to\_compare=sum ('financials'[sale price])

return

if (not isblank(\_value\_to\_comapre),

divide (\_value\_to\_comapre - \_baseline\_value, \_baseline\_value))