**PBI\_Desktop** **DAX Functions**

Data Analysis Expressions (**DAX**)

**T\_CarDetails\_Produced\_CrossJoin = CROSSJOIN('Cars Details','Cars Produced')**

C\_Dax\_ConCate = CONCATENATE([Age Group],CONCATENATE(" - ",[Category]))

C\_Total Revenue = [Revenue A]+[Revenue B]

C\_Profit\_Margin = [Total Cost]/[C\_Total Revenue]

C\_Profit\_Margin = DIVIDE([Total Cost],[C\_Total Revenue],0)

C\_Profit\_Margin = 1-DIVIDE([Total Cost],[C\_Total Revenue],0)

C\_Profit\_Desc =IF([C\_Profit\_Margin]>0.70,"Very Good Profit",IF([C\_Profit\_Margin]>0.65,"Good Profit","Normal Profit"))

C\_Total\_Units = RELATED('Calculated-Columns-Units'[Units sold A]) + RELATED('Calculated-Columns-Units'[Units sold B])

T\_DIM\_Date = CALENDAR("01/01/2016","12/31/2022")

C\_DayNumber = [Daily Date].[Day]

C\_MonthNumber = [Daily Date].[MonthNo]

C\_MonthName = [Daily Date].[Month]

C\_QuarterName = [Daily Date].[Quarter]

C\_QuarterNo = [Daily Date].[QuarterNo]

C\_Sem\_Name = IF( [C\_MonthNumber]<=6,"Sem 1","Sem 2")

C\_Year = [Daily Date].[Year]

C\_Week\_Number = WEEKNUM([Daily Date])

C\_Week\_Day\_Number = WEEKDAY([Daily Date])

C\_Week\_Day\_Name = SWITCH([C\_Week\_Day\_Number],1,"Sunday",2,"Monday",3,"Tuesday",4,"Wednesday",5,"Thursday",6,"Friday","Saturday")

M\_TotalSales = SUM([Sales Amount])

M\_Total\_Revenue = SUMX(Category\_Total,[Available Count]\*[Unit Cost])

M\_Count = COUNT([SubCategory ])

M\_CountA = COUNTA([SubCategory ])

M\_Count\_Bool = COUNT([Stock Available]) // Will not work in bool data COUNT Function

M\_CountA\_Bool = COUNTA([Stock Available])

M\_COUNTROWS = COUNTROWS(Product\_Countx)

M\_COUNTBLANK = COUNTBLANK([SubCategory ])

M\_DISTINCTCOUNT = DISTINCTCOUNT([SubCategory ])

M\_DISTINCTCOUNTNOBLANK = DISTINCTCOUNTNOBLANK([SubCategory ])

M\_Total\_Population = SUM([Population])

M\_T\_Female\_POpulation = CALCULATE(SUM([Population]),FILTER(Fact\_Population,[Gender]="Female"))

M\_T\_Feamale\_Percentage = DIVIDE([M\_T\_Female\_Population],[M\_Total\_Population],0)

M\_T\_Female\_Child = CALCULATE(SUM([Population]),

FILTER(Fact\_Population,[Gender]="Female"),

FILTER(Fact\_Population,[Agegroup\_ID]=2))

M\_Female\_Child\_UsingAND =CALCULATE(SUM(Fact\_Population[Population]),FILTER(Fact\_Population,[Gender]="Female" && [Agegroup\_ID]=2))

M\_World\_Population = CALCULATE([M\_Total\_Population],ALL(DIM\_Region))

M\_each\_Country\_Pop\_Percent = DIVIDE([M\_Total\_Population],[M\_World\_Population],0)

M\_ALLEXCEPT\_Region\_Pop = CALCULATE([M\_Total\_Population],ALLEXCEPT(DIM\_Region,DIM\_Region[Region Name]))

//WHEN WE add Region Name .It will not Summarize M\_ALLEXCEPT\_Region\_Pop value

M\_Rank\_Pop = RANKX(ALL(DIM\_Region),[M\_Total\_Population],,DESC)

M\_Rank\_Skip\_Pop = RANKX(ALL(DIM\_Region),[M\_Total\_Population],,DESC,Skip)

M\_RegionWise\_Rank = RANKX(ALLSELECTED(DIM\_Region),[M\_Total\_Population],,DESC,Skip)

M\_RegionWise\_Rank = RANKX(ALLSELECTED(DIM\_Region),CALCULATE(SUM(Fact\_Population[Population])),,DESC,Skip)

M\_SKIP\_Ranks\_Marks = RANKX(ALL(Student\_Marks),CALCULATE(SUM([Marks])),,DESC,Skip)

M\_Dense\_Ranks\_Marks = RANKX(ALL(Student\_Marks),CALCULATE(SUM([Marks])),,DESC,Dense)

M\_SEL\_TOPN\_VAlue =IF(HASONEVALUE(TopN\_Table[TopN\_Desc]),SELECTEDVALUE(TopN\_Table[TopN\_Values]),BLANK())

M\_SEL\_TOPN\_VAlue = IF(HASONEVALUE(TopN\_Table[TopN\_Desc]),SELECTEDVALUE(TopN\_Table[TopN\_Values]),COUNTROWS(ALL(DIM\_Region)))

M\_Pop\_Sel\_TOPN\_Value\_Rank = IF([M\_Rank\_Pop]<=[M\_SEL\_TOPN\_VAlue],[M\_Total\_Population],BLANK())

M\_Lead\_NextDay\_Sales = CALCULATE(SUM('Calculated-Columns-Revenue'[Revenue A]),DATEADD('Calculated-Columns-Revenue'[Date],1,DAY))

M\_Variance\_sales = [M\_Lead\_NextDay\_Sales]-SUM('Calculated-Columns-Revenue'[Revenue A] )

M\_Lead\_NextMonth\_Sales = CALCULATE(SUM('Calculated-Columns-Revenue'[Revenue A]),DATEADD('Calculated-Columns-Revenue'[Date],1,MONTH))

M\_Lead\_NextYear\_Sales = CALCULATE(SUM('Calculated-Columns-Revenue'[Revenue A]),DATEADD('Calculated-Columns-Revenue'[Date],1,YEAR))

M\_Lead\_PreviousYear\_Sales = CALCULATE(SUM('Calculated-Columns-Revenue'[Revenue A]),DATEADD('Calculated-Columns-Revenue'[Date],-1,YEAR))

M\_Lead\_NextQUARTER\_Sales = CALCULATE(SUM('Calculated-Columns-Revenue'[Revenue A]),DATEADD('Calculated-Columns-Revenue'[Date],1,QUARTER))

M\_MTD = CALCULATE(SUM('Calculated-Columns-Revenue'[Revenue A]),DATESMTD('Calculated-Columns-Revenue'[Date]))

M\_YTD = CALCULATE(SUM('Calculated-Columns-Revenue'[Revenue A]),DATESYTD('Calculated-Columns-Revenue'[Date]))

M\_RunningTotal\_All = CALCULATE(SUM('Calculated-Columns-Revenue'[Revenue A]),FILTER('Calculated-Columns-Revenue','Calculated-Columns-Revenue'[Date]<=MAX('Calculated-Columns-Revenue'[Date]))

M\_Rank\_ItemsSales =RANKX(ALL(ItemSalesData),CALCULATE(SUM([SalesAmt])),,ASC,Skip)

M\_RunningTotal\_Items\_sales = CALCULATE(SUM([SalesAmt]),TOPN([M\_Rank\_ItemsSales],ALL(ItemSalesData)

SalesAmt running total in ItemName =

CALCULATE(

    SUM('ItemSalesData'[SalesAmt]),

    FILTER(

        ALLSELECTED('ItemSalesData'[ItemName]),

        ISONORAFTER('ItemSalesData'[ItemName], MAX('ItemSalesData'[ItemName]), DESC)

    )

)

M\_QTD = CALCULATE(SUM('Calculated-Columns-Revenue'[Revenue A]),DATESQTD('Calculated-Columns-Revenue'[Date]))

M\_SELECTED\_Period\_Value = IF(HASONEVALUE(Period\_Table[Period\_Desc]),SELECTEDVALUE(Period\_Table[Period\_ID]),BLANK())

M\_SelectedPeriod\_Total = SWITCH([M\_SELECTED\_Period\_Value],1,[M\_MTD],2,[M\_QTD],3,[M\_YTD],4,[M\_RunningTotal\_All],CALCULATE((SUM('Calculated-Columns-Revenue'[Revenue A]))))

M\_Dates\_Between = CALCULATE(SUM('Calculated-Columns-Revenue'[Revenue A]),DATESBETWEEN('Calculated-Columns-Revenue'[Date],"1/1/2016","12/31/2016"))

M\_Dates\_Period = CALCULATE(SUM('Calculated-Columns-Revenue'[Revenue A]),DATESINPERIOD('Calculated-Columns-Revenue'[Date],"1/1/2016",2,YEAR))

M\_SAMEPERIODLASTYEAR = CALCULATE(SUM('Calculated-Columns-Revenue'[Revenue A]),SAMEPERIODLASTYEAR('Calculated-Columns-Revenue'[Date]))

T\_RegionWise\_Total\_SUMMARIZE = SUMMARIZE(ALL(DIM\_Region),DIM\_Region[Region Name],"Total\_Population",CALCULATE(SUM(Fact\_Population[Population])))

T\_RegionWiseCuntryWise\_Total\_SUMMARIZE = SUMMARIZE(ALL(DIM\_Region),DIM\_Region[Region Name],DIM\_Region[Country Name],"Total\_Population",CALCULATE(SUM(Fact\_Population[Population])))

T\_GROUPBY = GROUPBY(Fact\_Population,DIM\_Region[Region Name],"Total\_Population",SUMX(CURRENTGROUP(),Fact\_Population[Population]))

T\_GROUPBY\_Mul = GROUPBY(Fact\_Population,DIM\_Region[Region Name],DIM\_Age[Category],"Total\_Population",SUMX(CURRENTGROUP(),Fact\_Population[Population]))

C\_CarName = LOOKUPVALUE('Cars Details'[Car Name],'Cars Details'[CarID],'Cars Produced'[Car ID])

T\_CarData = UNION('Cars Produced (3)','Cars Sold')

T\_Cross\_Join\_Op = CROSSJOIN('Cars Details','Cars Produced (3)')

T\_NATURALINNERJOIN\_Join\_Op = NATURALINNERJOIN('Cars Details','Cars Produced (3)')

T\_CALCULATETABLE = CALCULATETABLE(Fact\_Population,DIM\_Region[Country Name]="India",DIM\_Age[Agegroup\_ID]=5)

M\_Child\_Male\_Pop = CALCULATE(SUM([Population]),FILTER(DIM\_Region,DIM\_Region[Country Name]="India"),FILTER(Fact\_Population,[Agegroup\_ID]=2),FILTER(Fact\_Population,[Gender]="Male"))

**PBI Query Editor-**

**Group BY**

= Table.Group(#"Changed Type", {"Car ID"}, {{"Total\_Produced", each List.Sum([Produced]), type number}})