# DEMO 3 - Create Model Calculations using DAX in Power BI Complete

**Demo Objectives**

1. Create a calculated column for Total Sales retrieving the selling price per unit from the products table using the related tables function
2. Create a generated calendar date dimension table and connect it to the existing data model Merging Tables
3. Create two iterator measures.

* **SUMX –Sales**
* **AVERAGEX - Sales**

1. Create measures for
   * **Quantity**
   * **Variance between Sales and Sales Target**
   * **Variance % using the DIVIDE Function**
2. Create a measures table and organize measures into a folder structure.

**DEMO Steps**

|  |  |
| --- | --- |
| 1. Create a calculated column for Total Sales retrieving the product unit price from the products table using the related tables function  Create a new column titled Total Sales using the RELATED function  Explain to students how this function traverses the relational in the data model to retrieve the related values in the column | Total Sales = Sales[Quantity]\*RELATED('Product'[Selling price Per Unit]) |
| 2. Create a generated calendar date dimension table and connect it to the existing data model Merging Tables | Cal\_tbl =  ADDCOLUMNS(     CALENDARAUTO(),      "Month",MONTH([Date]),      "Year",YEAR([Date]),      "Month Short Name", FORMAT([Date],"mmm"),      "Month Long Name", FORMAT([Date],"mmmm"),      "Quater","Q"&QUARTER([Date]),      "Day of the week",FORMAT([Date],"ddd"),      "WeekNum",WEEKNUM([Date],2)  ) |
| 3. Create two iterator measures. | Total Sales = SUMX(Sales,Sales[Quantity]\*RELATED('Product'[Selling price Per Unit]))  Average Sales = AVERAGEX(Sales,Sales[Quantity]\*RELATED('Product'[Selling price Per Unit])) |
| 4. Create key report measures | Quantity = sum(Sales[Quantity])  Sale Target = sum('Sales Forecast'[Sales Target])  Variance = [Total Sales]-[Sale Target]  Variance % = DIVIDE([Variance],[Sale Target]) |
| 5. Create a table to store measure   * Explain to the students the benefits of measure organization and how to create folders to store the measure |  |
|  | **Please refer to the completed Demo 3 PBIX file for refrance** |