**Power BI Assignment 2 – DAX (Data Analysis Expressions)**

**E-Commerce Sales Analysis**

This assignment will help you explore e-commerce sales data analysis using Power BI. Below are the files you will be working with (click on each to download):

* [**List of Orders.csv**](https://drive.google.com/uc?export=download&id=1ocgqJ_eHlsW68WwdFJZuNxpXRbkb-rld)
* [**Order Details.csv**](https://drive.google.com/uc?export=download&id=18Ony_FnR7Qz-6BMUbwmd10kqzqqsMPwy)
* [**Sales target.csv**](https://drive.google.com/uc?export=download&id=17pxFFGIMbqfTdxONaaoyLS4a_lFUqWbl)

In this exercise, you will utilize DAX for data analysis and transformation, which involves creating calculated columns, measures, and tables to derive insights from the provided e-commerce sales data.

**Instructions:-**

**Calculated Columns:**

* **Create a Calculated Column for 'Category Type':** Add a calculated column in the Order Details table that combines the 'Category' and 'Sub-Category' columns into a single 'Category Type' column.
* **Calculate Revenue per Order in Order Details Table:** Create a calculated column in the Order Details table to compute the revenue (Amount \* Quantity) per order.
* **Create a Calculated Column to Categorize Sales:** Add a calculated column named ‘Sales Category’ in the Order Details table that categorizes each order as 'Above Average' or 'Below Average' based on the Amount value.
* **Format Date in Sales Target Table:** Create a calculated column named 'Target Month' in the Sales Target table to format the 'Month of Order Date' as 'mmm-yyyy'.

**Calculated Measures:**

* **Calculate Order Count**: Define a measure to count the total number of orders in the Order Details table.
* **Calculate Average Profit**: Create a measure to calculate the average profit per order.
* **Calculate Total Sales**: Define a measure to find the total sales amount for all orders.
* **Calculate Sales in Delhi**: Create a measure to calculate the total sales amount for orders placed in Delhi.
* **Calculate Year-to-Date (YTD) Sales**: Define a measure to calculate the total sales amount accumulated from the earliest order date up to each order date.

**Calculated Table:**

* **Create a Calculated Table for Customer Lifetime Value (CLV):** Generate a summary table that displays the total purchase amount for each customer, calculated from the Order Details table based on their names listed in the List of orders table.