**ASSIGNMENT 10 [23-09-25]**

**DAX (Data Analysis Expression)**

It is a formula Expression language used in Analysis Services. It is a collection of functions, operators, and constants that can be used in a formula or expression to calculate and return one or more values.

DAX helps you to create new information from data already present in your model.

**M [ power query language]:** This language is used within Power Query to connect to data sources, transform data, and prepare for analysis. It focuses on data extraction, transformation, and loading (ETL) operations.

**DAX [Data Analysis Expressions]**: is a language for data modelling and analysis. It creates calculated columns and measures, and defines complex calculations and aggregations.

**DAX Structure:** DAX has three inbuilt functions that are clubbed together or used individually to create a final DAX formula.

Column name= column name1\*column name2

Measure name= Average (column name)

**DAX Operator**

ARITHMETIC OPERATOR

COMPARISON OPERATOR

TEXT CONCATENATE OPERATOR

LOGICAL OPERATOR

**DAX Usage**

* Calculated column: When we want calculations to be done on a raw level basis, then we enter DAX into a calculated column.
* Calculated Measures: When we want to do calculations on an aggregate level and don’t particularly want to store information on the raw level basis comparison of two columns, measures don’t create physical value in your table, hence don’t increase file size.

**PRACTICAL**

FILE 🡺 BLANK REPORT🡪EXCEL WORKBOOK🡪DOWNLOAD PIZZA DATA🡪SELECT RAW PIZZA SALES🡪LOAD🡪CHANGE THE NAME TO PSALES.

**TO FIND OUT THE SECOND HALF OF THE YEAR**

SELECT ONE COLUMN🡪TABLE TOOLS TAB🡪NEW TABLE

RDATE=CALENDAR (STARTDATE, END DATE)

SELECT THE COLUMN🡪FORMAT🡪LONG DATE.

**SECOND HALF OF THE YEAR IS DISPLAYED**.

TABLE TOOL🡪NEW TABLE🡪AUTODATE🡪FORMAT 🡪LONG DATE.

**REPORT VIEW**

SELECT CARD🡪PSALES🡪NEWMEASURE🡪

DOB=DATE ()🡪FIELD🡪DRAG🡪FORMAT🡪LONG DATE.

SELECT CARD🡪PSALES 🡪NEW MEASURE🡪

TDATE=TODAY ()🡪FIELD🡪DRAG🡪FORMAT🡪LONG DATE.