## WHAT IS DAX

Dax is a collection of functions, operators and constant that can be used in a formula or expression, to calculate and return one or more values

Stated more simply ,DAX helps create new information from data already in your model

#### **HOW DAX DIFFERS FROM EXCEL FORMULA**

Excel formulas typically operates on cells, while dax formula work with entire table or columns, enabling more complex and dynamic calculation

Excel formulas are more used in excel sheets and spread sheets whereas DAX are used more in power bi, power pivot tables

In short excel are used in more day to day functions while dad are used in power bi

#### WHAT ARE THE BASIC DAX FUNCTIONS

**SUM**: adds up all the number in columns, for example

SUM (Sales [AMOUNT])

It will sum all the sales amount together

## **AVERAGE (Sales [Amount])**

It will provide average sales amount as a result

#### COUNT:

Count the number of items

COUNT [Sales [order id])

**COUNTA:** count all the non-empty cells in columns, including text and numbers

COUNTA (Sales [Customer Name])

MAX: finds the highest number in columns

Min: find the lowest

MAX (Sales [Amount])

MIN (Sales [Amount])

IF: checks if the condition is true or false and returns based on that

**CALCULATE**: CALCULATE (SUM (SALES [AMOUNT].SALES [REGIONS]

**FILTER:** filter (Sales, Sales [Amount]>500)

**RELATED:** gets data from another table that is related to this table

## WHAT ARE OPERATORS USED IN DAX

There are three types of operators used in dad those are

- Arithmetic Operators
- Logical
- Relational

# WHAT IS DIFFERENCE BETWEEN ROW CONTEXT AND FILTER CONTEXT

**Row context** is like focusing on single row in a table whereas performing calculation on that specific row

**FILTER CONTEXT**: filter context is like applying filter to a set of data and then performing calculation based on the filtered subset

**ALL:** all helps us to showcase data regardless of any filter that have been applied

Consider that you have sales table and on the sales table you have applied filter that will showcase information related to sales of northern region now you want to see the information of all the region hence you will use the ALL keywords

**ALLEXCEPT:** it will showcase all the information but will remove the information mentioned in except and not showcase it

**REMOVEFILTER**: remove filter will remove the filters

What are the three relationship present

- One to one
- One to many
- Many to one