

# ALL **DAX FUNCTION** DEFINITION WITH EXAMPLES

Note:- Full PDF In the comment section or in description



**@PREMMANDAL**



BUSINESS & DATA ANALYST

**CLEAN AND SHORT PDF FOR  
YOU  
EASY TO LEARN**

## 1. Aggregation Functions

- (i) **AVERAGE:-** The AVERAGE function calculates the arithmetic mean (average) of a column that contains numeric values. Non-numeric values like text or blanks are ignored.

**Syntax: AVERAGE(<Column>)**

**Example:-**

- Avg\_Sales= AVERAGE(Global\_Superstore2[Sales]) Avg\_Discount =
- AVERAGE(Global\_Superstore2[Discount]) Avg\_Profit\_Margin =
- AVERAGE(Global\_Superstore2[Profit]) Avg\_Qty\_Sold =
- AVERAGE(Global\_Superstore2[Quantity]) Avg\_Shipp\_Cost =
- AVERAGE(Global\_Superstore2[Shipping Cost])

- (ii). **AVERAGEA:-** The AVERAGEA function calculates the arithmetic mean (average) of a column but considers non-numeric values differently:

**Syntax: AVERAGEA(<Column>) Example:-**

- AverageShipModeRatings(A) = **AVERAGEA**(Global\_Superstore2[Ship Mode])
- AverageDiscountWithBlanks(A) = **AVERAGEA**(Global\_Superstore2[Discount])
- AverageOrderPriority(A) = **AVERAGEA**(Global\_Superstore2[Order Priority])
- AverageQuantityWithNumeric(A) = **AVERAGEA**(Global\_Superstore2[Quantity])

**(iii) AVERAGEX:-** The AVERAGEX function calculates the arithmetic mean of an expression evaluated for each row in a table.

**Syntax: AVERAGEX(<Table>, <Expression>)**

**Example:-**

- AverageProfitPerCategory=  
**AVERAGEX**(**SUMMARIZE**(Global\_Superstore2,Global\_Superstore2[Category],"Total\_Profit",**SUM**(Global\_Superstore2[Profit])),**SUM**(Global\_Superstore2[Profit]))
- Average(x)\_Sales\_Per\_Region =  
**AVERAGEX**(**SUMMARIZE**(Global\_Superstore2,Global\_Superstore2[Region],"Total\_Sales",**SUM**(Global\_Superstore2[Sales])),**SUM**(Global\_Superstore2[Sales]))
- AverageDiscountPerOrder(X) =
- **AVERAGEX**(Global\_Superstore2,Global\_Superstore2[Discount]\*Global\_Superstore2[Quantity])
- AverageShippingDays(X) =  
**AVERAGEX**(Global\_Superstore2,**DATEDIFF**(Global\_Superstore2[Order Date],Global\_Superstore2[Ship Date],DAY))
- AverageTop10CustomerSales(X) =  
**AVERAGEX**(**TOPN**(10,Global\_Superstore2,Global\_Superstore2[Sales],**DESC**),Global\_Superstore2[Sales])
- 

**(iv) Counts:-** Count the number of values in a column (ignoring blank values).

**Syntax: COUNT(<column>)**

- TotalOrders = COUNT(Global\_Superstore2[Order ID])
- NonBlankCustomerNames = COUNT(Global\_Superstore2[Customer Name])
- ProductIDCount = COUNT(Global\_Superstore2[Product ID])
- DiscountedSalesCount = COUNT(Global\_Superstore2[Discount])
- OrdersWithShippingCosts = COUNT(Global\_Superstore2[Shipping Cost])

**(v) COUNTAX:-** A DAX function that counts rows in a table where a given expression evaluates to a non-blank value.

**Syntax: COUNTAX(<table>, <expression>)**

```
HighDiscountOrders(countax) =  
COUNTAX(Global_Superstore2,IF(Global_Superstore2[Discount]>0.1,1,BLANK()))  
LargeOrderCount(Countax) =  
COUNTAX(Global_Superstore2,IF(Global_Superstore2[Quantity]>10,1,BLANK()))  
OrdersWithProfit(Countax) =  
COUNTAX(Global_Superstore2,IF(Global_Superstore2[Profit]>0,1,BLANK()))  
ZeroProfitOrders(countax) =  
COUNTAX(Global_Superstore2,IF(Global_Superstore2[Profit]=0,1,BLANK()))
```

**(vi) COUNTBLANK :-** A DAX function that counts the number of blank or empty values in a specified column.

**Syntax: COUNTBLANK(<column>)**

```
MissingCustomerName(CB) = COUNTBLANK(Global_Superstore2[Customer Name])  
MissingOrderPriorities(CB) = COUNTBLANK(Global_Superstore2[Order Priority])  
MissingProductIDs(CB) = COUNTBLANK(Global_Superstore2[Product ID])  
MissingShippingCost(CB) = COUNTBLANK(Global_Superstore2[Shipping Cost])  
NoDiscountOrders(CB) = COUNTBLANK(Global_Superstore2[Discount])
```

**(vii) COUNTROWS :-** A DAX function that counts the total number of rows in a table or a table expression.

**Syntax: COUNTROWS(<table>)**

```
TotalRows(CR) = COUNTROWS(Global_Superstore2) ProductCategoriesCount(CR) =  
COUNTROWS(VALUES(Global_Superstore2[Category])) ShippingModesCount(CR) =  
COUNTROWS(VALUES(Global_Superstore2[Ship Mode])) SubcategoriesCount(CR) =  
COUNTROWS(VALUES(Global_Superstore2[Sub-Category])) UniqueRegion(CR) =  
COUNTROWS(VALUES(Global_Superstore2[Region]))
```



**@PREMMANDAL**   
BUSINESS & DATA ANALYST

# Was this helpful

**WOULD YOU MIND SHOWING YOUR SUPPORT  
BY GIVING IT A LIKE?  
INSPIRE ME TO CREATE MORE!**

