What is SUMX Power BI Function?

- The Power BI Data Analysis Expressions (DAX) comprises over 200 functions, operators, and constants that provide immense flexibility in Data Analysis tasks.
- SUMX Power BI is a DAX iterator function that forms the fundamental block for tabular models.
- Being an iterator function, DAX SUMX iterates through every row of a specified table and facilitates the sum of products.
- This means that the product of the corresponding field values is first performed for each row and the values are then added.

Syntax

A typical SUMX Power BI function looks like this:
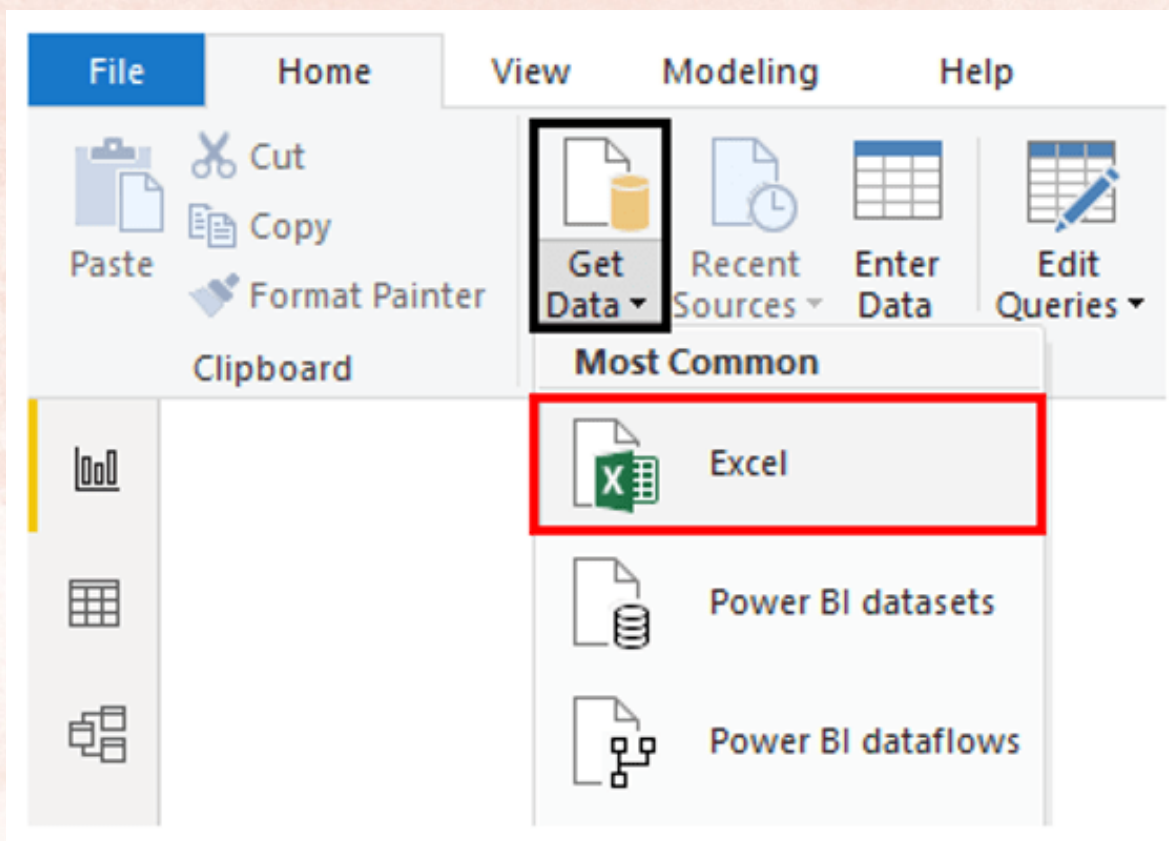
SUMX (<Table>, <Expression>)

Power BI

How To Use SUMX in Power BI?

	A	B	C
1	**City**	**Price**	**Units**
2	Bangalore	14	175
3	Mumbai	18	229
4	Bangalore	14	241
5	Delhi	13	156
6	Mumbai	17	188
7	Hyderabad	15	242
8	Delhi	23	250
9	Mumbai	17	246
10	Mumbai	11	187
11	Hyderabad	19	224
12	Delhi	14	110
13	Mumbai	12	157
14	Hyderabad	20	122
15	Hyderabad	17	176
16	Delhi	14	224
17	Bangalore	23	184
18	Mumbai	15	105
19	Bangalore	19	100
20	Delhi	11	174

- **Applying the SUMX Power BI function is very much straightforward.**
- **For the purpose of this demonstration, a sample "Sales_Table" is considered.**
- **The dataset contains data pertaining to different cities, the cost price of a product, and the number of units sold.**
- **Using the SUMX DAX function, the total sales value can be calculated.**
- **To do so, follow the below-mentioned steps.**

Power BI

As you can observe, the table contains 3 columns: City, Price, and Units. You can now upload this dataset to Power BI.

- To do so, go to the "Home" menu and click on the "Get Data" tab.

- Since our data is in Excel, select the "Excel" option.

- Click on "Load" and name the table as "Sales_Table".

- **To arrive at each row calculation, apply the SUMX Power BI function in "New Measure". Right-click on the table and select "New Measure".**

- **Name this new measure as "Sales Value".**

- **Open the SUMX function and provide the table name and the expression to be evaluated. The table name is "Sales_Table" and you need to multiply Units with Price to get the Sales Value**

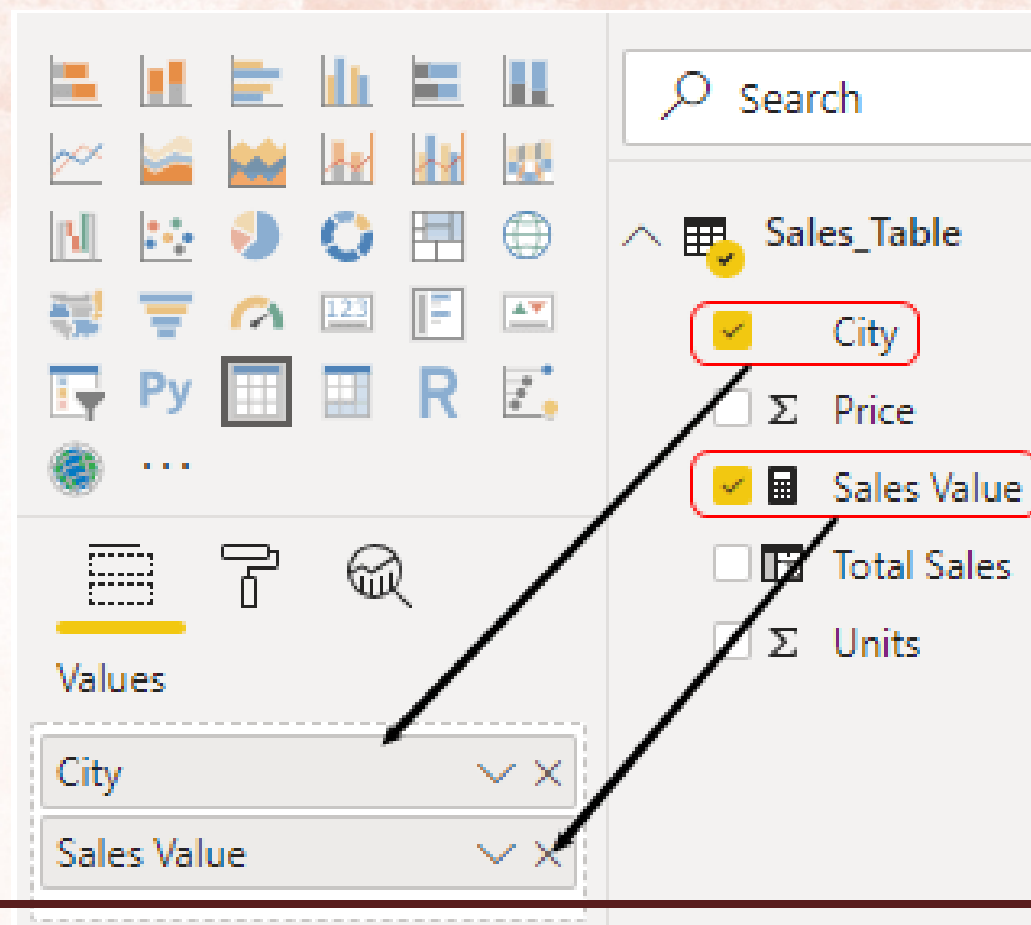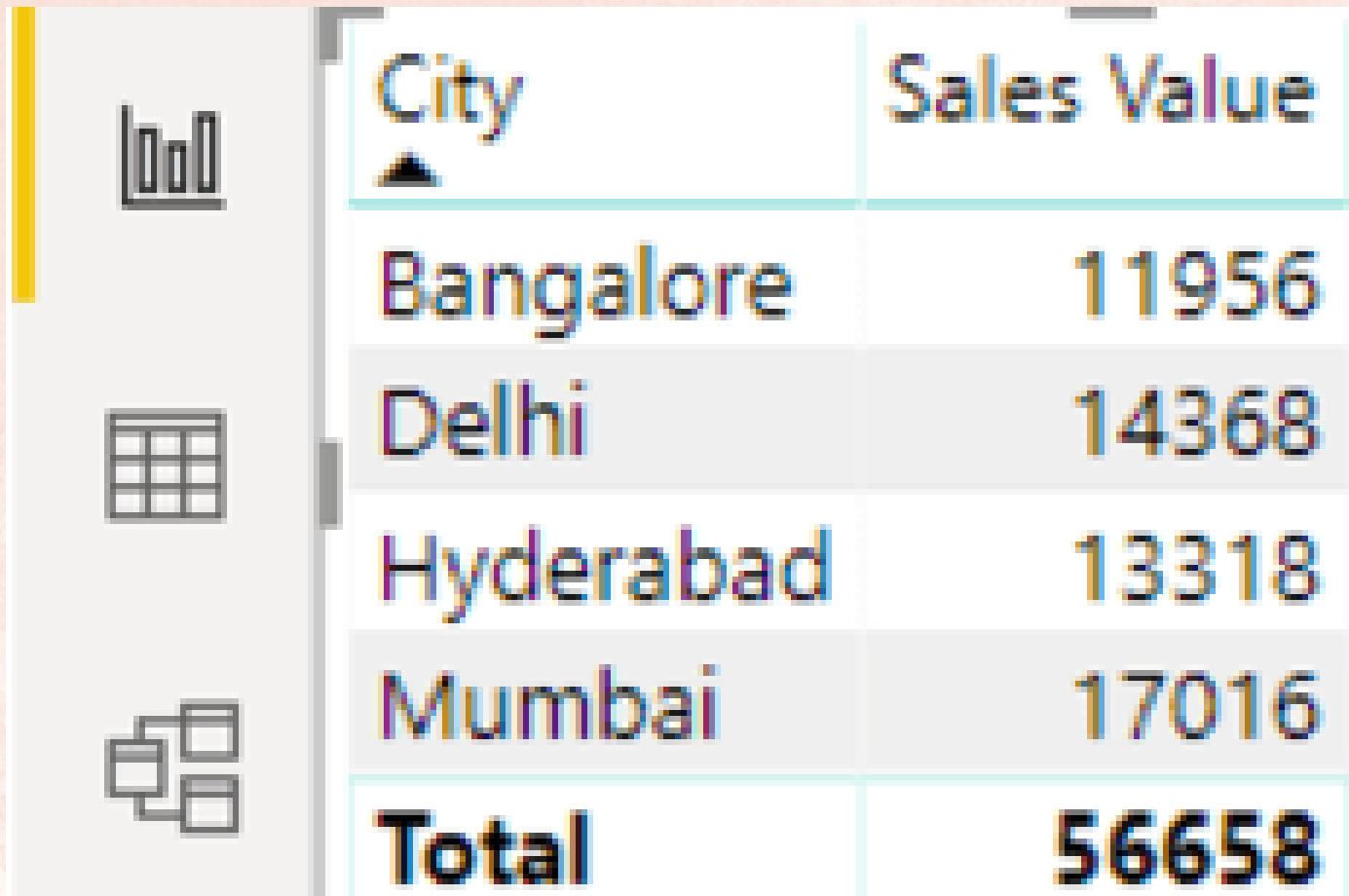- **Close the bracket and press "Enter" to get the result.**

Now, to visualize the results, click on the "Report" tab and insert the "Table" visual in it from the visualization list.

- **Drag and drop the "City" and "Sale Value" fields under the "Values" tab to get the summary table.**

This returns the Sales Value for each city as desired.

City	Sales Value
Bangalore	11956
Delhi	14368
Hyderabad	13318
Mumbai	17016
Total	**56658**

Thank you