

Special Function - 2 & Integrating Excel with Google Sheets

- OFFSET : it allow us to fetch matrix [row and Col].

Sales Record

	2018	2019	2020
102	287	391	
665	303	217	
1553	832	776	
89	198	101	
456	693	359	
532	476	598	
503	772	1212	
1567	1309	1234	
1047	1597	2150	
88	53	45	
39	12	17	
629	978	771	
1129	1609	1374	

Result

	387	456	693
L	561	532	476
S	499	503	772
T			
F	88	53	45
I	39	12	17
N	629	978	771
D	1129	1609	1374
F			
N			
2018	2019	2020	
102	287	391	
665	303	217	
1553	832	776	
89	198	101	

→ SumProduct

SUMPRODUCT:

The **SUMPRODUCT** function in Google Sheets is a versatile function that multiplies corresponding components in the specified arrays or ranges and returns the sum of those products. It's often used for weighted averages, calculating the dot product of two arrays, or in various other mathematical calculations.

Here's a quick example with a real-time dataset to illustrate how to use the **SUMPRODUCT** function:

Suppose you have the following dataset in your Google Sheet:

A	B	C	D
Item	Price	Quantity	Total
Apple	1.5	10	
Banana	0.75	20	
Orange	2.0	15	

What is Array : A continuous data store having same data type

2 4 9 11 15 21 25 29 31 15 10

→ Integer

'a' 'c' 'd' 'f' 'g' 'j' '\$' '#'



Array of character

"Geekster", "Krishna", "Amit", "Santosh", "Raghvendra"

	A	B	C	D	E	F	G
1	Chair type	Color	Size	Price	Qty		
2	Mesh	Red	M	80	20	1600	
3	Mesh	Blue	M	75	8	600	
4	Leather	Blue	L	150	4	600	
5	Leather	Red	M	130	10	1300	1950
6	Leather	Blue	M	130	5	650	
7							
8							
9	Total Sales		1950				
10	Chair Type	Leather					
11	Size	M					
12							

- Image

=IMAGE("https://encrypted-tbn0.gstatic.com/im

IMAGE(URL, [mode], [height], [width])

4

mode - 1 : Stretching the image at max , ignoring the aspect ratio.

mode - 2 : Stretching to fit the complete cell.

mode - 3 : original size.

mode - 4 : Activate your height & width Parameter

↓ mode - 4 : Activate your height & width Parameter

Data Cleaning and Merging Using Power Query Editor

→ Excel : Power Query Editor : Transforming data

Complex Data where we need to work upon cleaning or merging the columns , or append the data.



Table 1

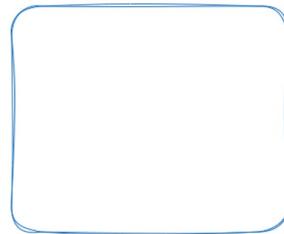


Table 2

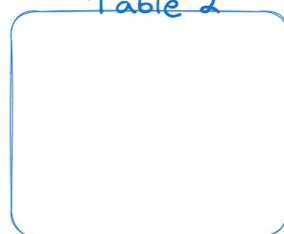
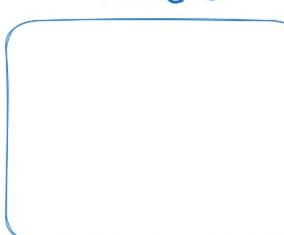


Table 3



Joining of Data : Row Append

Joining of Data : Column Merge

Navigator

<input type="checkbox"/>	Select multiple items
<input type="checkbox"/>	Display Options
<input checked="" type="checkbox"/>	ProductData.xlsx [5]
<input type="checkbox"/>	Table_1
<input type="checkbox"/>	Table_2
<input type="checkbox"/>	Index
<input checked="" type="checkbox"/>	Product Data
<input checked="" type="checkbox"/>	Salesperson

SalespersonKey	Salesperson	Supervisor	Manager	Colun
102	Gustavo Barros	Emily Rocha	Victor Castro	
125	Gustavo Gomes	Diogo Carvalho	Gabriel Azevedo	
144	Felipe Goncalves	Sofia Ribeiro	Gabriel Azevedo	
183	Isabella Sousa	Emily Rocha	Victor Castro	
194	Estevan Souza	Diogo Carvalho	Gabriel Azevedo	
196	Leonardo Cardoso	Diego Araujo	Victor Castro	
215	Carla Ferreira	Diego Araujo	Victor Castro	
265	Julio Lima	Diogo Carvalho	Gabriel Azevedo	
285	Mateus Costa	Sofia Ribeiro	Gabriel Azevedo	
326	Julia Silva	Sofia Ribeiro	Gabriel Azevedo	

Product Data
 Salesperson

215	Carla Ferreira	Diego Araujo	Victor Castro
265	Julio Lima	Diogo Carvalho	Gabriel Azevedo
285	Mateus Costa	Sofia Ribeiro	Gabriel Azevedo
326	Julia Silva	Sofia Ribeiro	Gabriel Azevedo
660	Julietta Gomes	Emily Rocha	Victor Castro
669	Kaua Araujo	Fernando Silva	Victor Castro



ETL : Extract, Transform, Load

Data Cleaning

sheet Name

Diagram illustrating the ETL process using Power BI:

- Extract:** Represented by the 'Salesperson' table in the Power BI canvas.
- Transform:** Represented by the 'Transform' section in the Power BI canvas, which includes:
 - Data Type:** Circled in green, showing the 'SalespersonKey' column being converted from Int64 to Text.
 - Sort , Filter:** Circled in green, showing the 'SalespersonKey' column being sorted.
 - Remove Columns:** Circled in green, showing columns 5 through 9 being removed.
- Load:** Represented by the 'Load' button in the Power BI ribbon.

Query Settings on the right side of the Power BI canvas:

- Rename:** Shows the table name is set to 'Salesperson'.
- APPLIED STEPS:** Shows the steps taken: 'Source', 'Navigation', 'Promoted Headers', and 'Changed Type'.
- Applied steps:** Shows the specific step 'Changed Type'.

Diagram illustrating the 'Transform' section in Power BI:

- Data Type:** Set to 'Text'.
- Use First Row as Headers:** Selected (circled in blue).
- Replace Values:** Set to 1.
- Transform:** Grouped by '1'.

Change the header name from column 1, 2 -> to the actual heading being present on my first row

actual heading being present
on my first row