

PORTOFOLIO KEAHLIAN MS EXCEL

Keahlian yang saya miliki berupa: data formatting and cleansing; conditional if/ifs; conditional formatting; Join multisheet (vlookup, offset-match); Pivot Table; What if Analysis

Beberapa penerapannya sebagai berikut.

A. PENDAHULUAN

Data yang digunakan adalah SUPORSTORE DATA (Akses data: <https://github.com/ainunmardiyah/Excel.git>) terdiri dari beberapa sheet:

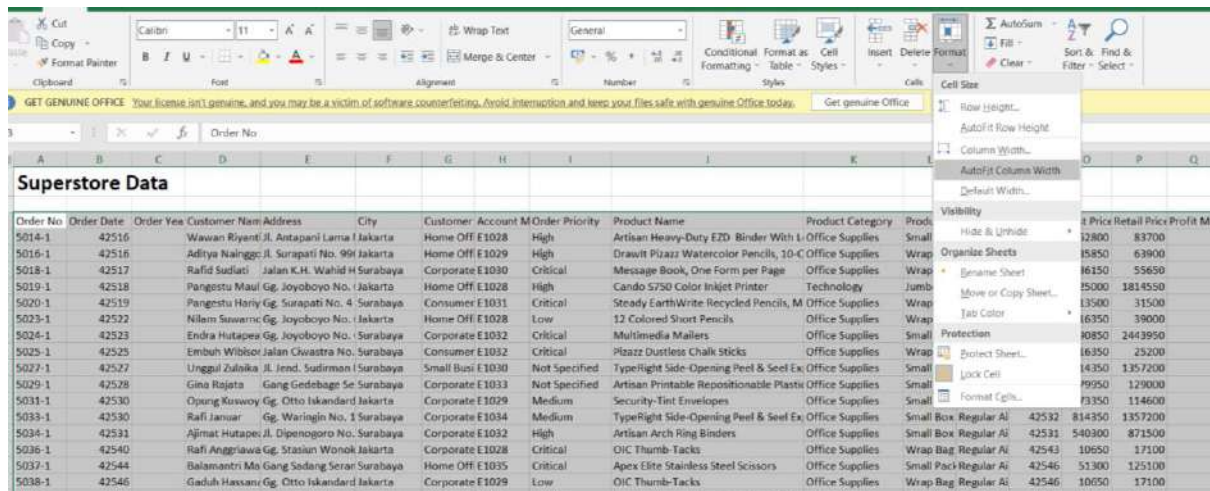
1. Description: penjelasan header kolom/konteks data (Metadata)
2. Data: data penjualan
3. Employee: data pegawai
4. Helper: table bantu untuk ketentuan dan biaya jasa pengiriman
5. Pivot Location: Penerapan pivot table pada data penjualan berdasarkan kota
6. Pivot Customer and Product Type: Penjualan produk per kategori berdasarkan tipe customer
7. What If Scenario: Data yang digunakan untuk menggunakan tools what if analysis, yakni scenario manager
8. Scenario Manager Summary: Hasil ringkasan dari sheet what if scenario/scenario manager
9. What If Goal Seek: Penerapan tools what if, yakni goal seek

Bagian-bagian dalam portofolio:

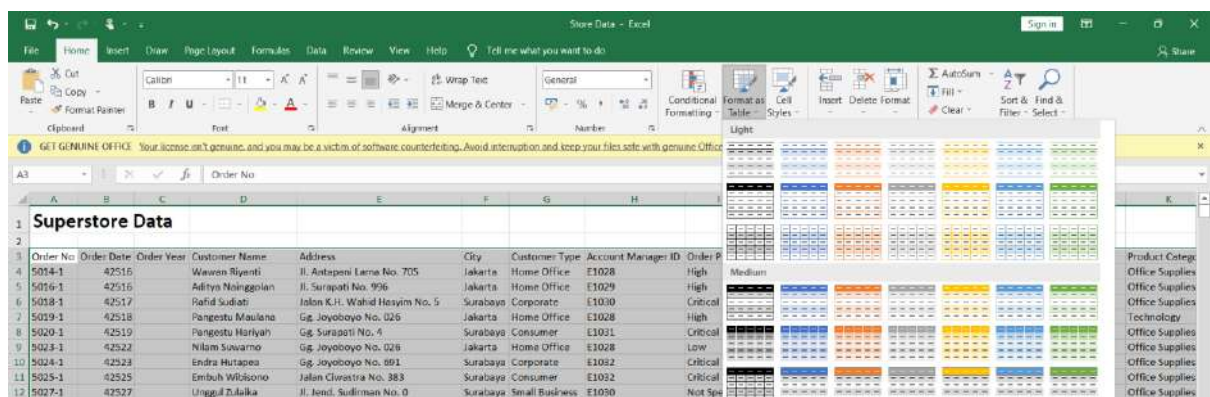
- A. Pendahuluan: penjelasan tentang data yang digunakan
- B. Tahap awal: pembersihan data awal
- C. Cases: kasus-kasus dari penerapan rumus dari memformat data, penggunaan rumus agregasi sederhana, mengekstrak data hingga menampilkan/visualisasi data
 - Case: Memformat data dan mengekstrak data tahun
 - Case: Menghitung profit, diskon, total pembelian sebelum diskon, ongkir dan biaya akhir
 - Case: Employee Database (Ekstrak data seperti left, mid, right)
 - Case: Cari nama account manager (di sheet employee) dari account manager ID (di sheet data). Rumus VLOOKUP
 - Case: Praktik Pivot Table
 - Case: Menggunakan rumus offset-match untuk mengisi shipping cost berdasarkan product container dan ship mode
 - Case: What If Analysis Scenario Manager
 - Case: Goal Seek (Misal menentukan profit tertentu dengan merubah beberapa variabel)

TAHAP AWAL

1. Merapihkan data, yakni lebar kolom disesuaikan agar datanya terlihat jelas

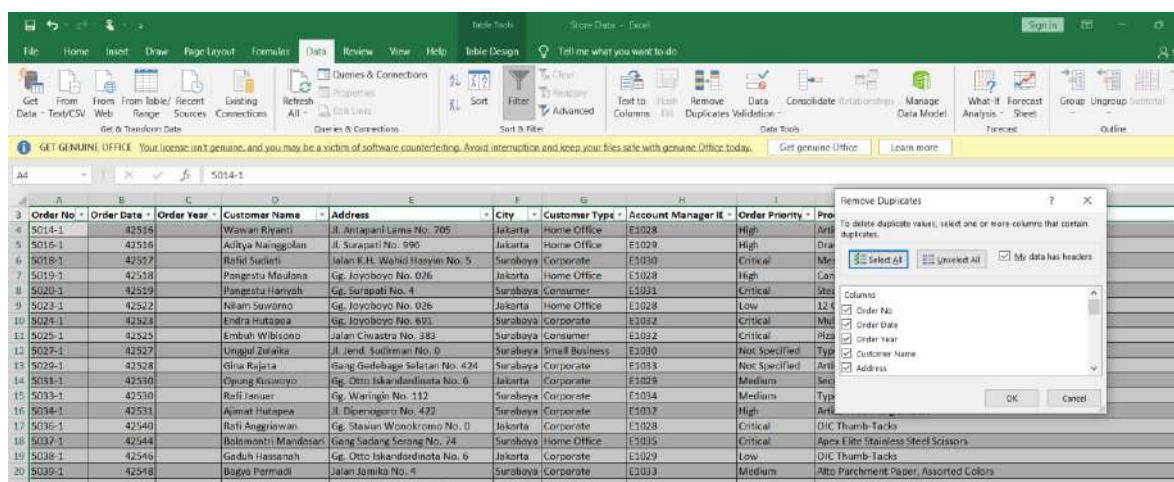


2. Buat jadi format table

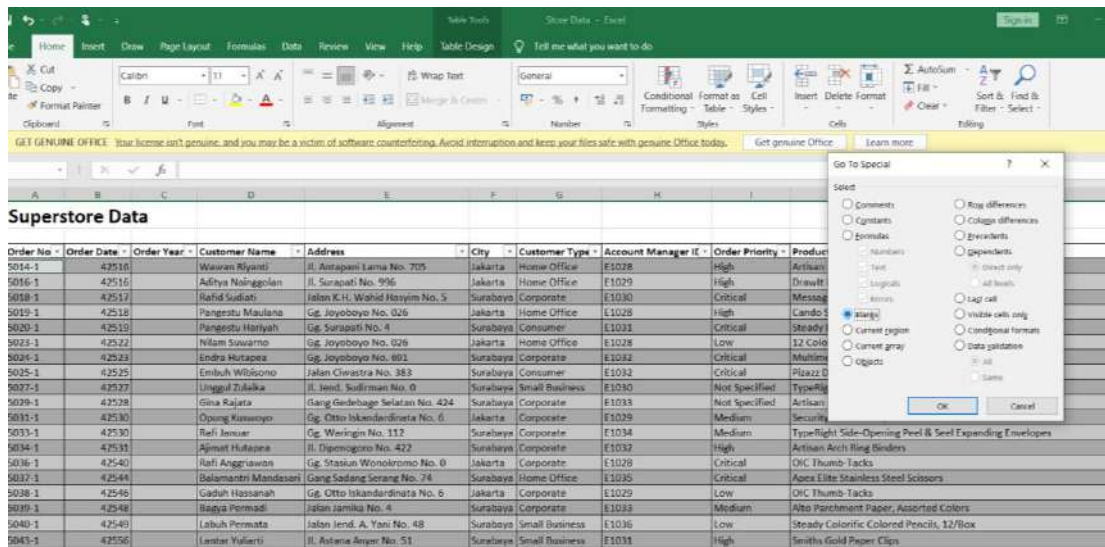


3. Bersihkan data

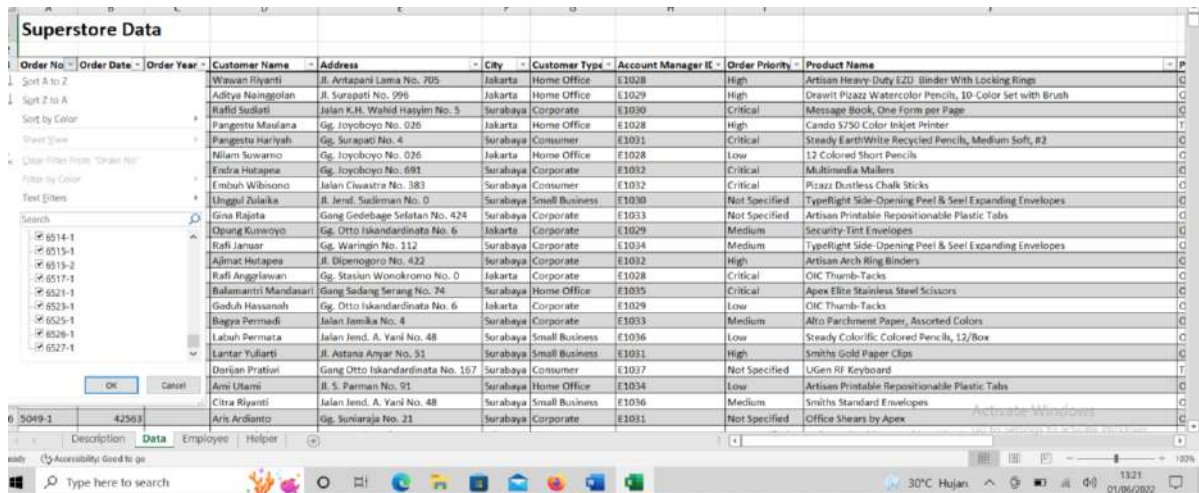
Menghapus duplikat



Cari baris yang kosong, kecuali untuk kolom yang memang belum terisi atau perlu perhitungan



Atau bisa juga menggunakan dengan mengecek filter pada masing-masing kolom apakah ada item blank di bagian paling bawah



4. Isi data-data yang ada sesuai case yang diperlukan

B. CASES

Case: Memformat data dan mengekstrak data tahun

1. Menformat data tanggal dari tipe general menjadi short date

The screenshot shows the Microsoft Excel interface with the 'Superstore Data' table. The 'Order Date' column is selected, and the 'Short Date' number format is applied. The table contains 25 rows of data, including columns for Order No., Order Date, Order Year, Customer Name, Address, City, and Product Name. The 'Order Date' column now displays dates in a short format (e.g., 26/05/2016).

Order No.	Order Date	Order Year	Customer Name	Address	City	Product Name
5014-1	26/05/2016	2016	Wawan Riyanti	Jl. Antapani Lama No. 705	Jakarta	Artisan Heavy-Duty EZD Binder With Locking Rings
5016-1	22/05/2016	2016	Aditya Munggalan	Jl. Surapati No. 995	Jakarta	Drawitt Pizzaz Watercolor Pencils, 10-Color Set with Brush
5018-1	27/05/2016	2016	Rafid Sudarti	Jalan K.H. Wahid Hasyim No. 5	Surabaya	Message Book, One Form per Page
5019-1	28/05/2016	2016	Pangestu Maulana	Gg. Joyoboyo No. 026	Surabaya	Cando S750 Color Inkjet Printer
5020-1	29/05/2016	2016	Pangestu Hariyah	Gg. Surapati No. 4	Surabaya	Steady EarthWrite Recycled Pencils, Medium Soft, #2
5023-1	01/06/2016	2016	Nilam Suwarno	Gg. Joyoboyo No. 026	Jakarta	12 Colored Short Pencils
5024-1	02/06/2016	2016	Endra Hutapea	Gg. Joyoboyo No. 691	Surabaya	Multimedia Mailers
5025-1	04/06/2016	2016	Emboh Wibisono	Jalan Cwastra No. 383	Surabaya	Pizzaz Dustless Chalk Sticks
5027-1	06/06/2016	2016	Unggul Zulika	Jl. Jend. Sudirman No. 0	Surabaya	TypeRight Side-Opening Peel & Seal Expanding Envelopes
5029-1	07/06/2016	2016	Gina Rajata	Gang Gedebage Selatan No. 424	Surabaya	Artisan Printable Repositionable Plastic Tabs
5031-1	09/06/2016	2016	Opung Kuswoyo	Gg. Otto Iskandardinata No. 6	Jakarta	Security-Tint Envelopes
5033-1	09/06/2016	2016	Rafi Januar	Gg. Waringin No. 112	Surabaya	TypeRight Side-Opening Peel & Seal Expanding Envelopes
5034-1	10/06/2016	2016	Ajimat Hutapea	Jl. Diponegoro No. 422	Surabaya	Artisan Arch Ring Binders
5036-1	19/06/2016	2016	Rafi Anggrawan	Gg. Stasiun Wonokromo No. 0	Jakarta	OIC Thumb-Tacks
5037-1	23/06/2016	2016	Balamantri Mandasari	Gang Sadang Serang No. 74	Surabaya	Apex Elite Stainless Steel Scissors
5038-1	25/06/2016	2016	Gaduh Hassanah	Gg. Otto Iskandardinata No. 6	Jakarta	OIC Thumb-Tacks
5039-1	27/06/2016	2016	Bagya Permedi	Jalan Jemika No. 4	Surabaya	Alto Parchment Paper, Assorted Colors
5040-1	28/06/2016	2016	Labuh Permata	Jalan Jend. A. Yani No. 48	Surabaya	Steady Colorific Colored Pencils, 12/Box
5043-1	05/07/2016	2016	Lantari Yulianti	Jl. Astana Anyar No. 51	Surabaya	Smiths Gold Paper Clips
5045-1	08/07/2016	2016	Danjan Pratiwi	Gang Otto Iskandardinata No. 167	Surabaya	UGen RF Keyboard
5047-1	09/07/2016	2016	Ami Utami	Jl. S. Parman No. 91	Surabaya	Artisan Printable Repositionable Plastic Tabs
5048-1	09/07/2016	2016	Citra Riyanti	Jalan Jend. A. Yani No. 48	Surabaya	Smiths Standard Envelopes
5049-1	12/07/2016	2016	Aris Ardianto	Gg. Suniaraja No. 21	Surabaya	Office Shears by Apex

2. Mengekstrak data tahun dari kolom Order Date

The screenshot shows the Microsoft Excel interface with the 'Superstore Data' table. The 'Order Year' column is created by extracting the year from the 'Order Date' column using the formula `=YEAR([@Order Date])`. The table contains 25 rows of data, including columns for Order No., Order Date, Order Year, Customer Name, Address, City, and Product Name. The 'Order Year' column now displays the year (e.g., 2016).

Order No.	Order Date	Order Year	Customer Name	Address	City	Product Name
5014-1	26/05/2016	=YEAR([@Order Date])	Wawan Riyanti	Jl. Antapani Lama No. 705	Jakarta	Artisan Heavy-Duty EZD Binder With Locking Rings
5016-1	22/05/2016	=YEAR([@Order Date])	Aditya Munggalan	Jl. Surapati No. 995	Jakarta	Drawitt Pizzaz Watercolor Pencils, 10-Color Set with Brush
5018-1	27/05/2016	=YEAR([@Order Date])	Rafid Sudarti	Jalan K.H. Wahid Hasyim No. 5	Surabaya	Message Book, One Form per Page
5019-1	28/05/2016	=YEAR([@Order Date])	Pangestu Maulana	Gg. Joyoboyo No. 026	Surabaya	Cando S750 Color Inkjet Printer
5020-1	29/05/2016	=YEAR([@Order Date])	Pangestu Hariyah	Gg. Surapati No. 4	Surabaya	Steady EarthWrite Recycled Pencils, Medium Soft, #2
5023-1	01/06/2016	=YEAR([@Order Date])	Nilam Suwarno	Gg. Joyoboyo No. 026	Jakarta	12 Colored Short Pencils
5024-1	02/06/2016	=YEAR([@Order Date])	Endra Hutapea	Gg. Joyoboyo No. 691	Surabaya	Multimedia Mailers
5025-1	04/06/2016	=YEAR([@Order Date])	Emboh Wibisono	Jalan Cwastra No. 383	Surabaya	Pizzaz Dustless Chalk Sticks
5027-1	06/06/2016	=YEAR([@Order Date])	Unggul Zulika	Jl. Jend. Sudirman No. 0	Surabaya	TypeRight Side-Opening Peel & Seal Expanding Envelopes
5029-1	07/06/2016	=YEAR([@Order Date])	Gina Rajata	Gang Gedebage Selatan No. 424	Surabaya	Artisan Printable Repositionable Plastic Tabs
5031-1	09/06/2016	=YEAR([@Order Date])	Opung Kuswoyo	Gg. Otto Iskandardinata No. 6	Jakarta	Security-Tint Envelopes
5033-1	09/06/2016	=YEAR([@Order Date])	Rafi Januar	Gg. Waringin No. 112	Surabaya	TypeRight Side-Opening Peel & Seal Expanding Envelopes
5034-1	10/06/2016	=YEAR([@Order Date])	Ajimat Hutapea	Jl. Diponegoro No. 422	Surabaya	Artisan Arch Ring Binders
5036-1	19/06/2016	=YEAR([@Order Date])	Rafi Anggrawan	Gg. Stasiun Wonokromo No. 0	Jakarta	OIC Thumb-Tacks
5037-1	23/06/2016	=YEAR([@Order Date])	Balamantri Mandasari	Gang Sadang Serang No. 74	Surabaya	Apex Elite Stainless Steel Scissors
5038-1	25/06/2016	=YEAR([@Order Date])	Gaduh Hassanah	Gg. Otto Iskandardinata No. 6	Jakarta	OIC Thumb-Tacks
5039-1	27/06/2016	=YEAR([@Order Date])	Bagya Permedi	Jalan Jemika No. 4	Surabaya	Alto Parchment Paper, Assorted Colors
5040-1	28/06/2016	=YEAR([@Order Date])	Labuh Permata	Jalan Jend. A. Yani No. 48	Surabaya	Steady Colorific Colored Pencils, 12/Box
5043-1	05/07/2016	=YEAR([@Order Date])	Lantari Yulianti	Jl. Astana Anyar No. 51	Surabaya	Smiths Gold Paper Clips
5045-1	08/07/2016	=YEAR([@Order Date])	Danjan Pratiwi	Gang Otto Iskandardinata No. 167	Surabaya	UGen RF Keyboard
5047-1	09/07/2016	=YEAR([@Order Date])	Ami Utami	Jl. S. Parman No. 91	Surabaya	Artisan Printable Repositionable Plastic Tabs
5048-1	09/07/2016	=YEAR([@Order Date])	Citra Riyanti	Jalan Jend. A. Yani No. 48	Surabaya	Smiths Standard Envelopes
5049-1	12/07/2016	=YEAR([@Order Date])	Aris Ardianto	Gg. Suniaraja No. 21	Surabaya	Office Shears by Apex

Case: Menghitung profit, diskon, total pembelian sebelum diskon, ongkir dan biaya akhir

- Masukkan formula pada kolom profit dengan cara mengurangi harga retail dengan harga beli. Format data jangan lupa disesuaikan

Product Name	Product Category	Product Container	Ship Mode	Ship Date	Cost Price	Retail Price	Profit Margin	Order Quantity	Sub Total	Discount %	Discount
Artisan Heavy-Duty EZD Binder With Locking Rings	Office Supplies	Small Box	Regular Air	42517	52800	83700	$=([Retail Price]-[Cost Price])$	29	3%		
Drawitt Pizazz Watercolor Pencils, 10-Color Set with Brush	Office Supplies	Wrap Bag	Regular Air	42517	35850	63900		29	3%		
Message Book, One Form per Page	Office Supplies	Wrap Bag	Express Air	42519	36150	55650		42	7%		
Cando S250 Color Inkjet Printer	Technology	Jumbo Drum	Delivery Truck	42520	1125000	1814550		6	8%		
Steady Earth/Write Recycled Pencils, Medium Soft, #2	Office Supplies	Wrap Bag	Regular Air	42520	13500	31500		17	3%		
12 Colored Short Pencils	Office Supplies	Small Box	Regular Air	42527	16350	39000		47	10%		
Multimedia Mailers	Office Supplies	Small Box	Regular Air	42528	1490850	2649900		32	9%		
Plaza Dustless Chalk Sticks	Office Supplies	Wrap Bag	Regular Air	42527	16350	25200		33	6%		
TypeRight Side-Opening Peel & Seal Expanding Envelopes	Office Supplies	Small Box	Regular Air	42528	814350	1357200		8	7%		
Artisan Printable Repositionable Plastic Tabs	Office Supplies	Small Box	Regular Air	42528	79950	129000		48	0%		
Security-Tint Envelopes	Office Supplies	Small Box	Regular Air	42532	73350	114600		18	10%		
TypeRight Side-Opening Peel & Seal Expanding Envelopes	Office Supplies	Small Box	Regular Air	42532	814350	1357200		3	3%		
Artisan Arch Ring Binders	Office Supplies	Small Box	Regular Air	42531	540300	871500		50	5%		
OIC Thumb Tacks	Office Supplies	Wrap Bag	Regular Air	42543	10650	17100		50	6%		
Apex Elite Stainless Steel Scissors	Office Supplies	Small Pack	Regular Air	42546	51300	125100		16	3%		
OIC Thumb Tacks	Office Supplies	Wrap Bag	Regular Air	42546	10650	17100		38	2%		
Alto Parchment Paper, Assorted Colors	Office Supplies	Small Box	Regular Air	42549	68850	109200		22	1%		
Steady Colorific Colored Pencils, 12/Box	Office Supplies	Wrap Bag	Regular Air	42553	19500	43200		48	7%		
Smiths Gold Paper Clips	Office Supplies	Wrap Bag	Regular Air	42559	27300	44700		22	4%		
UGen RF Keyboard	Technology	Small Box	Regular Air	42561	1223850	2396850		30	1%		
Artisan Printable Repositionable Plastic Tabs	Office Supplies	Small Box	Regular Air	42567	79950	129000		37	4%		
Smiths Standard Envelopes	Office Supplies	Small Box	Regular Air	42560	52800	85200		24	6%		
Office Shavers by Apex	Office Supplies	Small Pack	Regular Air	42564	14100	31200		4	2%		

- Masukkan formula pada kolom Sub Total dengan cara mengalikan harga retail dengan jumlah barang yang dibeli

Product Category	Product Container	Ship Mode	Ship Date	Cost Price	Retail Price	Profit Margin	Order Quantity	Sub Total	Discount %	Discount Rp	Order Total	Shipping Cost	Total
Office Supplies	Small Box	Regular Air	42517	Rp. 52.800	Rp. 83.700	Rp. 30.900	29	$=([Retail Price]*[Order Quantity])$					
Office Supplies	Wrap Bag	Regular Air	42517	Rp. 35.850	Rp. 63.900	Rp. 28.050	29		3%				
Office Supplies	Wrap Bag	Express Air	42519	Rp. 36.150	Rp. 55.650	Rp. 19.500	42		7%				
Technology	Jumbo Drum	Delivery Truck	42520	Rp. 1.125.000	Rp. 1.814.550	Rp. 689.550	6		8%				
Office Supplies	Wrap Bag	Regular Air	42520	Rp. 13.500	Rp. 31.500	Rp. 18.000	17		3%				
Office Supplies	Wrap Bag	Regular Air	42527	Rp. 16.350	Rp. 39.000	Rp. 22.650	47		10%				
Office Supplies	Small Box	Regular Air	42528	Rp. 1.490.850	Rp. 2.443.950	Rp. 953.100	32		9%				
Office Supplies	Wrap Bag	Regular Air	42527	Rp. 16.350	Rp. 25.200	Rp. 8.850	33		4%				
Office Supplies	Small Box	Regular Air	42528	Rp. 814.350	Rp. 1.357.200	Rp. 542.850	8		7%				
Office Supplies	Small Box	Regular Air	42528	Rp. 79.950	Rp. 129.000	Rp. 49.050	48		0%				
Office Supplies	Small Box	Regular Air	42532	Rp. 73.350	Rp. 114.600	Rp. 41.250	18		10%				
Office Supplies	Small Box	Regular Air	42532	Rp. 814.350	Rp. 1.357.200	Rp. 542.850	3		3%				
Office Supplies	Small Box	Regular Air	42531	Rp. 540.300	Rp. 871.500	Rp. 331.200	50		5%				
Office Supplies	Wrap Bag	Regular Air	42543	Rp. 10.650	Rp. 17.100	Rp. 6.450	50		6%				
Office Supplies	Small Pack	Regular Air	42546	Rp. 51.300	Rp. 125.100	Rp. 73.800	16		3%				
Office Supplies	Wrap Bag	Regular Air	42546	Rp. 10.650	Rp. 17.100	Rp. 6.450	38		2%				
Office Supplies	Small Box	Regular Air	42549	Rp. 68.850	Rp. 109.200	Rp. 40.350	22		1%				
Office Supplies	Wrap Bag	Regular Air	42553	Rp. 19.500	Rp. 43.200	Rp. 23.700	48		7%				
Office Supplies	Wrap Bag	Regular Air	42559	Rp. 27.300	Rp. 44.700	Rp. 17.400	22		4%				
Technology	Small Box	Regular Air	42561	Rp. 1.223.850	Rp. 2.399.850	Rp. 1.176.000	30		1%				
Office Supplies	Small Box	Regular Air	42567	Rp. 79.950	Rp. 129.000	Rp. 49.050	37		4%				
Office Supplies	Small Box	Regular Air	42560	Rp. 52.800	Rp. 85.200	Rp. 32.400	24		6%				
Office Supplies	Small Pack	Regular Air	42564	Rp. 14.100	Rp. 31.200	Rp. 17.100	4		2%				

- Masukkan formula pada kolom Discount Rp dengan cara mengalikan harga sub total dengan diskon yang didapat

Product Category	Product Container	Ship Mode	Ship Date	Cost Price	Retail Price	Profit Margin	Order Quantity	Sub Total	Discount %	Discount Rp	Order Total	Shipping Cost	Total
Office Supplies	Small Box	Regular Air	42517	Rp. 52.800	Rp. 83.700	Rp. 30.900	29	Rp. 896.100	3%	$=([Sub Total]*[Discount %])$			
Office Supplies	Wrap Bag	Regular Air	42517	Rp. 35.850	Rp. 63.900	Rp. 28.050	29	Rp. 813.450	3%				
Office Supplies	Wrap Bag	Express Air	42519	Rp. 36.150	Rp. 55.650	Rp. 19.500	42	Rp. 819.000	7%				
Technology	Jumbo Drum	Delivery Truck	42520	Rp. 1.125.000	Rp. 1.814.550	Rp. 689.550	6	Rp. 4.137.300	8%				
Office Supplies	Wrap Bag	Regular Air	42520	Rp. 13.500	Rp. 31.500	Rp. 18.000	17	Rp. 306.000	3%				
Office Supplies	Wrap Bag	Regular Air	42527	Rp. 16.350	Rp. 39.000	Rp. 22.650	47	Rp. 1.064.550	10%				
Office Supplies	Small Box	Regular Air	42528	Rp. 1.490.850	Rp. 2.443.950	Rp. 953.100	32	Rp. 30.699.200	9%				
Office Supplies	Wrap Bag	Regular Air	42527	Rp. 16.350	Rp. 25.200	Rp. 8.850	33	Rp. 297.050	4%				
Office Supplies	Small Box	Regular Air	42528	Rp. 814.350	Rp. 1.357.200	Rp. 542.850	8	Rp. 4.342.800	7%				
Office Supplies	Small Box	Regular Air	42528	Rp. 79.950	Rp. 129.000	Rp. 49.050	48	Rp. 2.354.400	0%				
Office Supplies	Small Box	Regular Air	42532	Rp. 73.350	Rp. 114.600	Rp. 41.250	18	Rp. 242.500	10%				
Office Supplies	Small Box	Regular Air	42532	Rp. 814.350	Rp. 1.357.200	Rp. 542.850	3	Rp. 1.628.550	3%				
Office Supplies	Small Box	Regular Air	42531	Rp. 540.300	Rp. 871.500	Rp. 331.200	50	Rp. 16.560.000	5%				
Office Supplies	Wrap Bag	Regular Air	42543	Rp. 10.650	Rp. 17.100	Rp. 6.450	50	Rp. 322.500	6%				
Office Supplies	Small Pack	Regular Air	42546	Rp. 51.300	Rp. 125.100	Rp. 73.800	16	Rp. 1.180.800	3%				
Office Supplies	Wrap Bag	Regular Air	42546	Rp. 10.650	Rp. 17.100	Rp. 6.450	38	Rp. 245.100	2%				
Office Supplies	Small Box	Regular Air	42549	Rp. 68.850	Rp. 109.200	Rp. 40.350	22	Rp. 887.700	1%				
Office Supplies	Wrap Bag	Regular Air	42553	Rp. 19.500	Rp. 43.200	Rp. 23.700	48	Rp. 1.137.600	7%				
Office Supplies	Wrap Bag	Regular Air	42559	Rp. 27.300	Rp. 44.700	Rp. 17.400	22	Rp. 382.800	4%				
Technology	Small Box	Regular Air	42561	Rp. 1.223.850	Rp. 2.399.850	Rp. 1.176.000	30	Rp. 35.280.000	1%				
Office Supplies	Small Box	Regular Air	42567	Rp. 79.950	Rp. 129.000	Rp. 49.050	37	Rp. 1.814.850	4%				
Office Supplies	Small Box	Regular Air	42560	Rp. 52.800	Rp. 85.200	Rp. 32.400	24	Rp. 777.600	6%				
Office Supplies	Small Pack	Regular Air	42564	Rp. 14.100	Rp. 31.200	Rp. 17.100	4	Rp. 68.400	2%				

- Masukkan formula pada kolom Order Total dengan cara mengurangi harga sub total dengan diskon

Product Category	Product Container	Ship Mode	Ship Date	Cost Price	Retail Price	Profit Margin	Order Quantity	Sub Total	Discount %	Discount Rp	Order Total	Shipping Cost	Total
Office Supplies	Small Box	Regular Air	42517	Rp. 52.800	Rp. 63.000	Rp. 30.900	29	Rp. 896.100	3%	Rp. 26.883	Rp. 922.983		
Office Supplies	Wrap Bag	Regular Air	42517	Rp. 35.850	Rp. 63.000	Rp. 28.050	29	Rp. 813.450	3%	Rp. 24.404	Rp. 837.854		
Office Supplies	Wrap Bag	Express Air	42519	Rp. 36.150	Rp. 55.650	Rp. 19.500	42	Rp. 819.000	7%	Rp. 57.330	Rp. 876.330		
Technology	Jumbo Drum	Delivery Truck	42520	Rp. 1.125.000	Rp. 1.814.550	Rp. 689.550	8	Rp. 4.137.300	8%	Rp. 330.984	Rp. 4.468.284		
Office Supplies	Wrap Bag	Regular Air	42520	Rp. 13.500	Rp. 31.500	Rp. 18.000	17	Rp. 306.000	8%	Rp. 9.180	Rp. 315.180		
Office Supplies	Wrap Bag	Regular Air	42527	Rp. 16.350	Rp. 39.000	Rp. 22.650	47	Rp. 1.094.550	10%	Rp. 109.455	Rp. 1.204.005		
Office Supplies	Small Box	Regular Air	42525	Rp. 1.490.850	Rp. 2.443.950	Rp. 953.100	32	Rp. 30.499.200	9%	Rp. 2.744.928	Rp. 33.244.128		
Office Supplies	Wrap Bag	Regular Air	42527	Rp. 16.350	Rp. 25.200	Rp. 8.850	33	Rp. 292.050	4%	Rp. 11.682	Rp. 303.732		
Office Supplies	Small Box	Regular Air	42528	Rp. 814.350	Rp. 1.357.200	Rp. 542.850	8	Rp. 4.342.800	7%	Rp. 303.996	Rp. 4.646.796		
Office Supplies	Small Box	Regular Air	42528	Rp. 79.950	Rp. 129.000	Rp. 49.050	48	Rp. 2.354.400	0%	Rp. -	Rp. 2.354.400		
Office Supplies	Small Box	Regular Air	42532	Rp. 23.350	Rp. 114.600	Rp. 41.250	18	Rp. 742.500	10%	Rp. 74.250	Rp. 816.750		
Office Supplies	Small Box	Regular Air	42532	Rp. 814.350	Rp. 1.357.200	Rp. 542.850	3	Rp. 1.628.550	3%	Rp. 48.857	Rp. 1.677.407		
Office Supplies	Small Box	Regular Air	42531	Rp. 540.300	Rp. 871.500	Rp. 331.200	50	Rp. 16.560.000	5%	Rp. 828.000	Rp. 17.388.000		
Office Supplies	Wrap Bag	Regular Air	42543	Rp. 10.050	Rp. 17.100	Rp. 6.450	50	Rp. 222.500	6%	Rp. 13.350	Rp. 235.850		
Office Supplies	Small Pack	Regular Air	42546	Rp. 31.300	Rp. 125.100	Rp. 73.800	18	Rp. 1.180.800	3%	Rp. 35.424	Rp. 1.216.224		
Office Supplies	Wrap Bag	Regular Air	42546	Rp. 10.050	Rp. 17.100	Rp. 6.450	38	Rp. 245.100	2%	Rp. 4.902	Rp. 250.002		
Office Supplies	Small Box	Regular Air	42549	Rp. 68.850	Rp. 109.200	Rp. 40.350	22	Rp. 887.700	1%	Rp. 8.877	Rp. 896.577		
Office Supplies	Wrap Bag	Regular Air	42553	Rp. 19.500	Rp. 43.200	Rp. 23.700	48	Rp. 1.137.600	7%	Rp. 79.632	Rp. 1.217.232		
Office Supplies	Wrap Bag	Regular Air	42559	Rp. 27.300	Rp. 44.700	Rp. 17.400	22	Rp. 382.800	4%	Rp. 15.312	Rp. 398.112		
Technology	Small Box	Regular Air	42561	Rp. 1.223.850	Rp. 2.399.850	Rp. 1.176.000	30	Rp. 35.280.000	1%	Rp. 352.800	Rp. 35.632.800		
Office Supplies	Small Box	Regular Air	42567	Rp. 79.950	Rp. 129.000	Rp. 49.050	37	Rp. 1.814.850	4%	Rp. 72.594	Rp. 1.887.444		
Office Supplies	Small Box	Regular Air	42560	Rp. 52.800	Rp. 85.200	Rp. 32.400	24	Rp. 777.600	6%	Rp. 46.656	Rp. 824.256		
Office Supplies	Small Pack	Regular Air	42564	Rp. 14.100	Rp. 31.200	Rp. 17.100	4	Rp. 68.400	2%	Rp. 1.368	Rp. 69.768		

Case: Employee Database (Ekstrak data seperti left, mid, right)

1. Rapikan lebar data
2. Set sebagai table, biar otomatis keisinya
3. Case pertama menggabungkan nama dengan menggunakan concatenate, jangan lupa karakter tambahan spasi.

Employee ID	First	Last	Full Name	Email	Date of Birth	Age	Date of Hire	Years of Service	Department	Location	Floor	City	Call
E1001	Raina	Aryani	=CONCATENATE(B4;" "&C4)						Executive	Surabaya 10-827			
E1002	Tari	Anggraini	=CONCATENATE(text1;text2;text3;text4;...)						Human Resources	Jakarta 11-806			
E1003	Karen	Riyanti			30151				IT	Jakarta 10-584			
E1004	Titin	Aryani			36545				Data	Jakarta 10-385			
E1005	Ilsa	Utami			33691				Sales	Jakarta 12-766			
E1006	Jessica	Hariyah			30076				Customer Service	Surabaya 12-388			
E1007	Almira	Hasanah			36166				Executive	Jakarta 11-594			
E1008	Sari	Astruti			31959				Sales	Surabaya 12-654			
E1009	Aurora	Anggraini			36535				Human Resources	Jakarta 10-851			
E1010	Yivi	Andriani			34393				Sales	Jakarta 11-316			
E1011	Eka	Nashrudin			32265				Human Resources	Jakarta 10-797			
E1012	Adiarja	Strait			29727				IT	Surabaya 10-779			
E1013	Sidiq	Prianowo			35257				Data	Surabaya 10-828			
E1014	Harsana	Budiman			33426				Human Resources	Jakarta 11-663			
E1015	Golar	Halim			36102				IT	Surabaya 11-426			
E1016	Kardi	Saptono			32506				Data	Jakarta 10-459			
E1017	Sabar	Situmorang			35494				Sales	Jakarta 12-465			
E1018	Dimaz	Zulkarnain			35216				Customer Service	Surabaya 12-440			
E1019	Balapati	Prasetya			32098				IT	Jakarta 10-828			
E1020	Eja	Widodo			34663				Human Resources	Surabaya 11-611			
E1021	Prabu	Haryanto			33510				IT	Surabaya 11-722			
E1022	Cayadi	Putra			37116				Data	Jakarta 11-807			
E1023	Gambiro	Prianowo			31008				Human Resources	Jakarta 12-854			

4. Case kedua mengisi kolom email

Employee Database													Date	02/06/2022
raina.aryani_e@myskill.co.id														
Employee ID	First	Last	Full Name	Email	Date of Birth	Age	Date of Hire	Years of Service	Department	Location	Floor	City	Call	
E1001	Raina	Aryani	Raina Aryani	=LOWER(CONCATENATE([@First];" ";&[@Last];" ";&"e@myskill.co.id"))					Executive	Surabaya 10-827	10	Surabaya	827	
E1002	Tari	Angraini	Tari Angraini	tari.angr_ CONCATENATE(text1; text2; [text3]; [text4]; [text5]; [text6]; ...)					Human Resources	Jakarta 11-806	11	Jakarta	806	
E1003	Karen	Riyanti	Karen Riyanti	karen.riyanti_	19/07/1982	40			IT	Jakarta 10-584	10	Jakarta	584	
E1004	Titin	Aryani	Titin Aryani	titin.aryani	20/01/2000	22			Data	Jakarta 10-385	10	Jakarta	385	
E1005	Ilsa	Utami	Ilsa Utami	ilsa.utami	28/03/1992	30			Sales	Jakarta 12-766	12	Jakarta	766	
E1006	Jessica	Hariyah	Jessica Hariyah	jessica.hariyah	05/05/1982	40			Customer Service	Surabaya 12-388	12	Surabaya	388	
E1007	Almira	Hasanah	Almira Hasanah	almira.hasanah_	06/01/1999	23			Executive	Jakarta 11-594	11	Jakarta	594	
E1008	Sari	Astuti	Sari Astuti	sari.astuti	01/07/1987	35			Sales	Surabaya 12-654	12	Surabaya	654	
E1009	Aurora	Angraini	Aurora Angraini	aurora.angraini_	10/01/2000	22			Human Resources	Jakarta 10-851	10	Jakarta	851	
E1010	Vivi	Andriani	Vivi Andriani	vivi.andriani	28/02/1994	28			Sales	Jakarta 11-316	11	Jakarta	316	
E1011	Eka	Nashiruddin	Eka Nashiruddin	eka.nashiruddin_	02/05/1988	34			Human Resources	Jakarta 10-797	10	Jakarta	797	
E1012	Adiarja	Sirait	Adiarja Sirait	adiarja.sirait_	21/05/1981	41			IT	Surabaya 10-779	10	Surabaya	779	
E1013	Sidiq	Pranowo	Sidiq Pranowo	sidiq.pranowo	11/07/1996	26			Data	Surabaya 10-878	10	Surabaya	878	
E1014	Harsana	Budiman	Harsana Budiman	harsana.budiman_	07/07/1991	31			Human Resources	Jakarta 11-663	11	Surabaya	663	
E1015	Galar	Halim	Galar Halim	galar.halim	03/11/1998	24			IT	Surabaya 11-426	11	Surabaya	426	
E1016	Kardi	Saptono	Kardi Saptono	kardi.saptono	29/12/1988	33			Data	Jakarta 10-459	10	Jakarta	459	
E1017	Sabar	Situmorang	Sabar Situmorang	sabar.situmorang_	05/03/1997	25			Sales	Jakarta 12-465	12	Jakarta	465	
E1018	Dimaz	Zulkarnain	Dimaz Zulkarnain	dimaz.zulkarnain	31/05/1996	26			Customer Service	Surabaya 12-440	12	Surabaya	440	
E1019	Balapati	Prasetya	Balapati Prasetya	balapati.prasetya	17/11/1987	35			IT	Jakarta 10-828	10	Jakarta	828	
E1020	Eja	Widodo	Eja Widodo	eja.widodo_	25/11/1994	28			Human Resources	Surabaya 11-611	11	Surabaya	611	
E1021	Prabu	Haryanto	Prabu Haryanto	prabu.haryanto_	29/09/1991	31			IT	Surabaya 11-722	11	Surabaya	722	
E1022	Cayadi	Putra	Cayadi Putra	cayadi.putra_	13/08/2001	21			Data	Jakarta 11-807	11	Jakarta	807	
E1023	Gambira	Pranowo	Gambira Pranowo	gambira.pranowo_	22/11/1984	38			Human Resources	Jakarta 12-854	12	Jakarta	854	

5. Case ketiga mendapatkan usia di kolom age

Employee Database													Date	02/06/2022
Employee ID	First	Last	Full Name	Email	Date of Birth	Age	Date of Hire	Years of Service	Department	Location	Floor	City	Call	
E1001	Raina	Aryani	Raina Aryani		30/11/1995	=YEARFRAC([@Date of Birth];\$N\$1)			Executive	Surabaya 10-827				
E1002	Tari	Angraini	Tari Angraini		14/10/1988	=YEARFRAC([start_date; end_date; [basis]])			Human Resources	Jakarta 11-806				
E1003	Karen	Riyanti	Karen Riyanti		19/07/1982	40			IT	Jakarta 10-584				
E1004	Titin	Aryani	Titin Aryani		20/01/2000	22			Data	Jakarta 10-385				
E1005	Ilsa	Utami	Ilsa Utami		28/03/1992	30			Sales	Jakarta 12-766				
E1006	Jessica	Hariyah	Jessica Hariyah		05/05/1982	40			Customer Service	Surabaya 12-388				
E1007	Almira	Hasanah	Almira Hasanah		06/01/1999	23			Executive	Jakarta 11-594				
E1008	Sari	Astuti	Sari Astuti		01/07/1987	35			Sales	Surabaya 12-654				
E1009	Aurora	Angraini	Aurora Angraini		10/01/2000	22			Human Resources	Jakarta 10-851				
E1010	Vivi	Andriani	Vivi Andriani		28/02/1994	28			Sales	Jakarta 11-316				
E1011	Eka	Nashiruddin	Eka Nashiruddin		02/05/1988	34			Human Resources	Jakarta 10-797				
E1012	Adiarja	Sirait	Adiarja Sirait		21/05/1981	41			IT	Surabaya 10-779				
E1013	Sidiq	Pranowo	Sidiq Pranowo		11/07/1996	26			Data	Surabaya 10-878				
E1014	Harsana	Budiman	Harsana Budiman		07/07/1991	31			Human Resources	Jakarta 11-663				
E1015	Galar	Halim	Galar Halim		03/11/1998	24			IT	Surabaya 11-426				
E1016	Kardi	Saptono	Kardi Saptono		29/12/1988	33			Data	Jakarta 10-459				
E1017	Sabar	Situmorang	Sabar Situmorang		05/03/1997	25			Sales	Jakarta 12-465				
E1018	Dimaz	Zulkarnain	Dimaz Zulkarnain		31/05/1996	26			Customer Service	Surabaya 12-440				
E1019	Balapati	Prasetya	Balapati Prasetya		17/11/1987	35			IT	Jakarta 10-828				
E1020	Eja	Widodo	Eja Widodo		25/11/1994	28			Human Resources	Surabaya 11-611				
E1021	Prabu	Haryanto	Prabu Haryanto		29/09/1991	31			IT	Surabaya 11-722				
E1022	Cayadi	Putra	Cayadi Putra		13/08/2001	21			Data	Jakarta 11-807				
E1023	Gambira	Pranowo	Gambira Pranowo		22/11/1984	38			Human Resources	Jakarta 12-854				

6. Case keempat mengekstrak atau memisalkan data di kolom Location untuk kolom Floor, City dan Call

Employee Database													Date	02/06/2022
Employee ID	First	Last	Full Name	Email	Date of Birth	Age	Date of Hire	Years of Service	Department	Location	Floor	City	Call	
E1001	Raina	Aryani	Raina Aryani		30/11/1995	27			Executive	Surabaya 10-827			=RIGHT([@Location];3)	
E1002	Tari	Angraini	Tari Angraini		14/10/1988	34			Human Resources	Jakarta 11-806				
E1003	Karen	Riyanti	Karen Riyanti		19/07/1982	40			IT	Jakarta 10-584				
E1004	Titin	Aryani	Titin Aryani		20/01/2000	22			Data	Jakarta 10-385				
E1005	Ilsa	Utami	Ilsa Utami		28/03/1992	30			Sales	Jakarta 12-766				
E1006	Jessica	Hariyah	Jessica Hariyah		05/05/1982	40			Customer Service	Surabaya 12-388				
E1007	Almira	Hasanah	Almira Hasanah		06/01/1999	23			Executive	Jakarta 11-594				
E1008	Sari	Astuti	Sari Astuti		01/07/1987	35			Sales	Surabaya 12-654				
E1009	Aurora	Angraini	Aurora Angraini		10/01/2000	22			Human Resources	Jakarta 10-851				
E1010	Vivi	Andriani	Vivi Andriani		28/02/1994	28			Sales	Jakarta 11-316				
E1011	Eka	Nashiruddin	Eka Nashiruddin		02/05/1988	34			Human Resources	Jakarta 10-797				
E1012	Adiarja	Sirait	Adiarja Sirait		21/05/1981	41			IT	Surabaya 10-779				
E1013	Sidiq	Pranowo	Sidiq Pranowo		11/07/1996	26			Data	Surabaya 10-878				
E1014	Harsana	Budiman	Harsana Budiman		07/07/1991	31			Human Resources	Jakarta 11-663				
E1015	Galar	Halim	Galar Halim		03/11/1998	24			IT	Surabaya 11-426				
E1016	Kardi	Saptono	Kardi Saptono		29/12/1988	33			Data	Jakarta 10-459				
E1017	Sabar	Situmorang	Sabar Situmorang		05/03/1997	25			Sales	Jakarta 12-465				
E1018	Dimaz	Zulkarnain	Dimaz Zulkarnain		31/05/1996	26			Customer Service	Surabaya 12-440				
E1019	Balapati	Prasetya	Balapati Prasetya		17/11/1987	35			IT	Jakarta 10-828				
E1020	Eja	Widodo	Eja Widodo		25/11/1994	28			Human Resources	Surabaya 11-611				
E1021	Prabu	Haryanto	Prabu Haryanto		29/09/1991	31			IT	Surabaya 11-722				
E1022	Cayadi	Putra	Cayadi Putra		13/08/2001	21			Data	Jakarta 11-807				
E1023	Gambira	Pranowo	Gambira Pranowo		22/11/1984	38			Human Resources	Jakarta 12-854				

Employee Database														Date	02/06/2022
Employee ID	First	Last	Full Name	Email	Date of Birth	Age	Date of Hire	Years of Service	Department	Location	Floor	City	Call		
E1001	Raina	Aryani	Raina Aryani		30/11/1995	27			Executive	Surabaya 10-827			=LEFT(@Location);FIND(";"@Location))-1		
E1002	Tari	Angraini	Tari Angraini		14/10/1988	34			Human Resources	Jakarta 11-806			806		
E1003	Karen	Riyanti	Karen Riyanti		19/07/1982	40			IT	Jakarta 10-584			584		
E1004	Titin	Aryani	Titin Aryani		20/01/2000	22			Data	Jakarta 10-385			385		
E1005	Ilsa	Utami	Ilsa Utami		28/03/1992	30			Sales	Jakarta 12-766			766		
E1006	Jessica	Hariyah	Jessica Hariyah		05/05/1982	40			Customer Service	Surabaya 12-388			388		
E1007	Almira	Hasanah	Almira Hasanah		06/01/1999	23			Executive	Jakarta 11-594			594		
E1008	Sari	Astuti	Sari Astuti		01/07/1987	35			Sales	Surabaya 12-654			654		
E1009	Aurora	Angraini	Aurora Angraini		10/01/2000	22			Human Resources	Jakarta 10-851			851		
E1010	Vivi	Andriani	Vivi Andriani		28/02/1994	28			Sales	Jakarta 11-316			316		
E1011	Eka	Nashiruddin	Eka Nashiruddin		02/05/1988	34			Human Resources	Jakarta 10-797			797		
E1012	Adiarja	Sirait	Adiarja Sirait		21/05/1981	41			IT	Surabaya 10-779			779		
E1013	Sidiq	Pranowo	Sidiq Pranowo		11/07/1996	26			Data	Surabaya 10-878			878		
E1014	Harsana	Budiman	Harsana Budiman		07/07/1991	31			Human Resources	Jakarta 11-663			663		
E1015	Galar	Halim	Galar Halim		03/11/1998	24			IT	Surabaya 11-426			426		
E1016	Kardi	Saptono	Kardi Saptono		29/12/1988	33			Data	Jakarta 10-459			459		
E1017	Sabor	Situmorang	Sabor Situmorang		05/03/1997	25			Sales	Jakarta 12-465			465		
E1018	Dimaz	Zulkarnain	Dimaz Zulkarnain		31/05/1996	26			Customer Service	Surabaya 12-440			440		
E1019	Balapati	Prasetya	Balapati Prasetya		17/11/1987	35			IT	Jakarta 10-828			828		
E1020	Eja	Widodo	Eja Widodo		25/11/1994	28			Human Resources	Surabaya 11-611			611		
E1021	Prabu	Haryanto	Prabu Haryanto		29/09/1991	31			IT	Surabaya 11-722			722		
E1022	Cayadi	Putra	Cayadi Putra		13/08/2001	21			Data	Jakarta 11-807			807		
E1023	Gambira	Pranowo	Gambira Pranowo		22/11/1984	38			Human Resources	Jakarta 12-854			854		

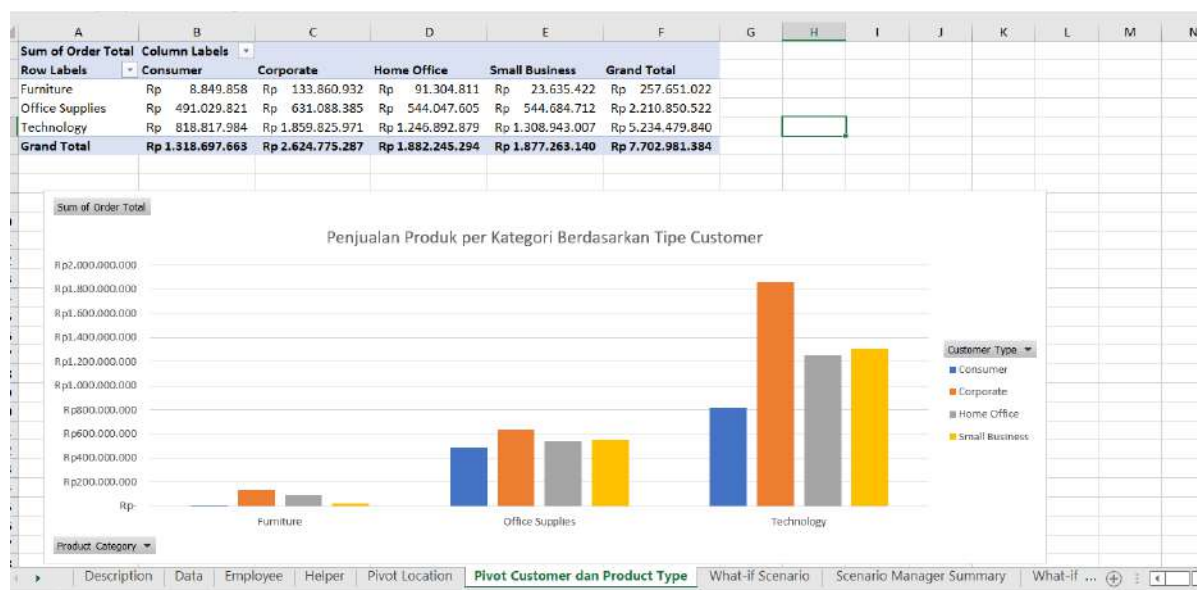
Database														Date	02/06/2022
Last	Full Name	Email	Date of Birth	Age	Date of Hire	Years of Service	Department	Location	Floor	City	Call				
Aryani	Raina Aryani		30/11/1995	27			Executive	Surabaya 10-827							
Angraini	Tari Angraini		14/10/1988	34			Human Resources	Jakarta 11-806							
Riyanti	Karen Riyanti		19/07/1982	40			IT	Jakarta 10-584							
Aryani	Titin Aryani		20/01/2000	22			Data	Jakarta 10-385							
Utami	Ilsa Utami		28/03/1992	30			Sales	Jakarta 12-766							
Hariyah	Jessica Hariyah		05/05/1982	40			Customer Service	Surabaya 12-388							
Hasanah	Almira Hasanah		06/01/1999	23			Executive	Jakarta 11-594							
Astuti	Sari Astuti		01/07/1987	35			Sales	Surabaya 12-654							
Angraini	Aurora Angraini		10/01/2000	22			Human Resources	Jakarta 10-851							
Andriani	Vivi Andriani		28/02/1994	28			Sales	Jakarta 11-316							
Nashiruddin	Eka Nashiruddin		02/05/1988	34			Human Resources	Jakarta 10-797							
Sirait	Adiarja Sirait		21/05/1981	41			IT	Surabaya 10-779							
Pranowo	Sidiq Pranowo		11/07/1996	26			Data	Surabaya 10-878							
Budiman	Harsana Budiman		07/07/1991	31			Human Resources	Jakarta 11-663							
Halim	Galar Halim		03/11/1998	24			IT	Surabaya 11-426							
Saptono	Kardi Saptono		29/12/1988	33			Data	Jakarta 10-459							
Situmorang	Sabor Situmorang		05/03/1997	25			Sales	Jakarta 12-465							
Zulkarnain	Dimaz Zulkarnain		31/05/1996	26			Customer Service	Surabaya 12-440							
Prasetya	Balapati Prasetya		17/11/1987	35			IT	Jakarta 10-828							
Widodo	Eja Widodo		25/11/1994	28			Human Resources	Surabaya 11-611							
Haryanto	Prabu Haryanto		29/09/1991	31			IT	Surabaya 11-722							
Putra	Cayadi Putra		13/08/2001	21			Data	Jakarta 11-807							
Pranowo	Gambira Pranowo		22/11/1984	38			Human Resources	Jakarta 12-854							

Case: Cari nama account manager (di sheet employee) dari account manager ID (di sheet data). Rumus VLOOKUP

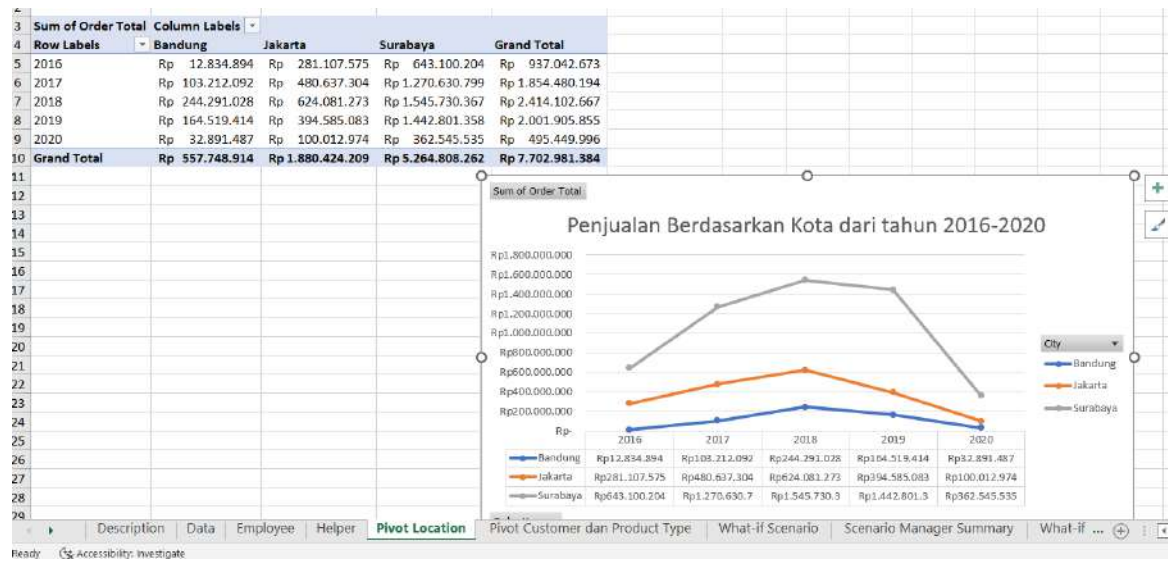
Superstore Data									
Order No	Order Date	Order Year	Customer Name	Address	City	Customer Type	Account Manager ID	AM Name	Order Priority
5014-1	26/05/2016	2016	Wawan Riyanti	Jl. Antapani Lama No. 705	Jakarta	Home Office	E1028	=VLOOKUP([@Account Manager ID],Table2[Employee ID],4,FALSE)	
5016-1	26/05/2016	2016	Aditya Neinggoan	Jl. Surapati No. 996	Jakarta	Home Office	E1029		High
5018-1	27/05/2016	2016	Rafid Sudiati	Jalan K.H. Wahid Hasyim No. 5	Surabaya	Corporate	E1030		Critical
5019-1	28/05/2016	2016	Pangestu Maulana	Gg. Joyoboyo No. 026	Jakarta	Home Office	E1028		High
5020-1	29/05/2016	2016	Pangestu Hariyah	Gg. Surapati No. 4	Surabaya	Consumer	E1031		Critical
5023-1	01/06/2016	2016	Nilam Suwarno	Gg. Joyoboyo No. 026	Jakarta	Home Office	E1028		Low
5024-1	02/06/2016	2016	Endra Hutapea	Gg. Joyoboyo No. 691	Surabaya	Corporate	E1032		Critical
5025-1	04/06/2016	2016	Embuh Wibisono	Jalan Ciwastra No. 383	Surabaya	Consumer	E1032		Critical
5027-1	06/06/2016	2016	Unggul Zulaika	Jl. Jend. Sudirman No. 0	Surabaya	Small Business	E1030		Not Specified
5029-1	07/06/2016	2016	Gina Rajata	Gang Gedebage Selatan No. 424	Surabaya	Corporate	E1033		Not Specified
5031-1	09/06/2016	2016	Opung Kuswoyo	Gg. Otto Iskandardinata No. 6	Jakarta	Corporate	E1029		Medium
5033-1	09/06/2016	2016	Rafi Januar	Gg. Waringin No. 112	Surabaya	Corporate	E1034		Medium
5034-1	10/06/2016	2016	Ajimat Hutapea	Jl. Dipenogoro No. 422	Surabaya	Corporate	E1032		High
5036-1	19/06/2016	2016	Rafi Angriawan	Gg. Stasiun Wonokromo No. 0	Jakarta	Corporate	E1028		Critical
5037-1	23/06/2016	2016	Balamantri Mandasari	Gang Sadang Serang No. 74	Surabaya	Home Office	E1035		Critical
5038-1	25/06/2016	2016	Gaduh Hassanah	Gg. Otto Iskandardinata No. 6	Jakarta	Corporate	E1029		Low
5039-1	27/06/2016	2016	Bagya Permedi	Jalan Jamika No. 4	Surabaya	Corporate	E1033		Medium
5040-1	28/06/2016	2016	Labuh Permata	Jalan Jend. A. Yani No. 48	Surabaya	Small Business	E1036		Low
5043-1	05/07/2016	2016	Lantar Yulianti	Jl. Astana Anyar No. 51	Surabaya	Small Business	E1031		High
5045-1	08/07/2016	2016	Darjan Pratiwi	Gang Otto Iskandardinata No. 167	Surabaya	Consumer	E1037		Not Specified
5047-1	09/07/2016	2016	Ami Utami	Jl. S. Parman No. 91	Surabaya	Home Office	E1034		Low
5048-1	09/07/2016	2016	Citra Riyanti	Jalan Jend. A. Yani No. 48	Surabaya	Small Business	E1036		Medium
5049-1	12/07/2016	2016	Aris Ardianto	Gg. Suniaraja No. 21	Surabaya	Corporate	E1031		Not Specified

Case: Praktik Pivot Table

Total Penjualan per Kategori Berdasarkan Tipe Konsumer



Total Penjualan Berdasarkan Kota



Case: Menggunakan rumus offset-match untuk mengisi shipping cost berdasarkan product container dan ship mode

Product Cat	Product C	Ship Mode	Ship Date	Cost Price	Retail Price	Profit Margin	Order Quantiti	Sub Total	Discount %	Discount Rp	Order Total	Shipping Cost	Total
Office Supplies	Small Box	Regular Air	42517	Rp. 52.800	Rp. 83.700	Rp. 20.900	29	Rp. 896.100	3%	Rp. 26.883	Rp. 869.217	=OFFSET(Helper1!\$C\$3;MATCH(\$A\$4:\$A\$5;1000);Helper1!\$D\$3:\$F\$3;0)	
Office Supplies	Wrap Bag	Regular Air	42517	Rp. 35.850	Rp. 63.900	Rp. 28.050	29	Rp. 813.450	3%	Rp. 24.404	Rp. 789.047		
Office Supplies	Wrap Bag	Express Air	42519	Rp. 36.150	Rp. 55.650	Rp. 19.500	42	Rp. 810.000	7%	Rp. 57.330	Rp. 761.670		
Technology	Jumbo Drum	Delivery Truck	42520	Rp. 1.125.000	Rp. 1.814.550	Rp. 689.550	6	Rp. 4.137.300	8%	Rp. 330.984	Rp. 3.806.316		
Office Supplies	Wrap Bag	Regular Air	42520	Rp. 13.500	Rp. 31.500	Rp. 18.000	17	Rp. 306.000	3%	Rp. 9.180	Rp. 296.820		
Office Supplies	Wrap Bag	Regular Air	42527	Rp. 16.350	Rp. 39.000	Rp. 22.650	47	Rp. 1.064.550	10%	Rp. 106.455	Rp. 958.095		
Office Supplies	Small Box	Regular Air	42525	Rp. 1.490.850	Rp. 2.443.950	Rp. 953.100	32	Rp. 30.496.200	9%	Rp. 2.744.928	Rp. 27.751.272		
Office Supplies	Wrap Bag	Regular Air	42527	Rp. 16.350	Rp. 25.300	Rp. 8.850	33	Rp. 792.050	4%	Rp. 11.682	Rp. 780.368		
Office Supplies	Small Box	Regular Air	42528	Rp. 814.350	Rp. 1.357.200	Rp. 542.850	8	Rp. 4.342.800	7%	Rp. 303.996	Rp. 4.038.804		
Office Supplies	Small Box	Regular Air	42528	Rp. 79.950	Rp. 129.000	Rp. 49.050	48	Rp. 2.354.400	0%	Rp. 0	Rp. 2.354.400		
Office Supplies	Small Box	Regular Air	42532	Rp. 73.350	Rp. 114.600	Rp. 41.250	18	Rp. 742.500	10%	Rp. 74.250	Rp. 668.250		
Office Supplies	Small Box	Regular Air	42532	Rp. 814.350	Rp. 1.357.200	Rp. 542.850	3	Rp. 1.628.550	3%	Rp. 48.857	Rp. 1.579.694		
Office Supplies	Small Box	Regular Air	42531	Rp. 540.300	Rp. 871.500	Rp. 331.200	50	Rp. 16.560.000	5%	Rp. 828.000	Rp. 15.732.000		
Office Supplies	Wrap Bag	Regular Air	42543	Rp. 10.650	Rp. 17.100	Rp. 6.450	50	Rp. 322.500	6%	Rp. 19.350	Rp. 303.150		
Office Supplies	Small Pack	Regular Air	42546	Rp. 51.300	Rp. 125.100	Rp. 73.800	18	Rp. 1.180.800	3%	Rp. 35.424	Rp. 1.145.376		
Office Supplies	Wrap Bag	Regular Air	42546	Rp. 10.650	Rp. 17.100	Rp. 6.450	38	Rp. 345.100	2%	Rp. 4.902	Rp. 340.198		
Office Supplies	Small Box	Regular Air	42549	Rp. 68.850	Rp. 109.200	Rp. 40.350	22	Rp. 887.700	1%	Rp. 8.877	Rp. 878.823		
Office Supplies	Wrap Bag	Regular Air	42553	Rp. 19.500	Rp. 43.200	Rp. 23.700	48	Rp. 1.137.600	7%	Rp. 79.632	Rp. 1.057.968		
Office Supplies	Wrap Bag	Regular Air	42559	Rp. 27.300	Rp. 44.700	Rp. 17.400	22	Rp. 382.800	4%	Rp. 15.312	Rp. 367.488		
Technology	Small Box	Regular Air	42561	Rp. 1.223.850	Rp. 2.399.850	Rp. 1.176.000	30	Rp. 35.280.000	1%	Rp. 352.800	Rp. 34.927.200		
Office Supplies	Small Box	Regular Air	42567	Rp. 79.950	Rp. 129.000	Rp. 49.050	37	Rp. 1.814.850	4%	Rp. 72.594	Rp. 1.742.256		
Office Supplies	Small Box	Regular Air	42560	Rp. 52.800	Rp. 85.200	Rp. 32.400	24	Rp. 777.600	6%	Rp. 46.656	Rp. 730.944		
Office Supplies	Small Pack	Regular Air	42564	Rp. 14.100	Rp. 31.200	Rp. 17.100	4	Rp. 68.400	2%	Rp. 1.368	Rp. 67.032		

Match dengan sheet helper

The screenshot shows an Excel spreadsheet with a shipping cost table and a helper sheet. The main table lists shipping costs for various products and ship modes. The helper sheet provides a lookup table for shipping costs based on product container and ship mode.

Product Container	Regular Air	Express Air	Delivery Truck
Wrap Bag	Rp. 5.000	Rp. 10.000	Rp. 25.000
Small Pack	Rp. 10.000	Rp. 20.000	Rp. 50.000
Small Box	Rp. 15.000	Rp. 30.000	Rp. 75.000
Medium Box	Rp. 20.000	Rp. 40.000	Rp. 100.000
Large Box	Rp. 50.000	Rp. 100.000	Rp. 250.000
Jumbo Drum	Rp. 100.000	Rp. 200.000	Rp. 500.000

Case: What If Analysis Scenario Manager

The screenshot displays the Microsoft Excel interface with the 'What-If Scenario' dialog box open. The dialog box prompts the user to enter values for each of the changing cells. The input values are as follows:

- Quantity: 20000
- Price: 50000
- Shipping_Cost: 20000
- Person: 130
- Price_per_Manpower: 230000

The background spreadsheet shows a 'Low Scenario' with the following data:

Item	Value	Unit	Total
Quantity	25,000		
Price per Product	Rp 50,000		
Total Revenue	Rp 1,250,000,000.00		
Shipping Cost	Rp 20,000		
Tax	10%		
Manpower	130		
Other Cost	Rp 2,500,000.00		
Total Expense	Rp 1,050,000,000.00		
Profit	Rp 200,000,000.00		

Hasil

The screenshot displays the 'Scenario Manager Summary' report in Microsoft Excel. The report compares the 'Current Values' and the 'Mid Scenario' values for various input cells and the resulting 'solver_opt' value.

Changing Cells:	Current Values	Mid Scenario
Quantity	25,000	30,000
Price	Rp 50,000	Rp 50,000
Shipping_Cost	Rp 20,000	Rp 20,000
Person	130	130
Price_per_Manpower	Rp 2,500,000.00	Rp 230,000.00
Result Cells:		
solver_opt	Rp 200,000,000.00	Rp 620,100,000.00

Notes: Current Values column represents values of changing cells at time Scenario Summary Report was created. Changing cells for each scenario are highlighted in gray.

Case: Goal Seek (Misal menentukan profit tertentu dengan merubah beberapa variabel)

The screenshot shows a Microsoft Excel spreadsheet with the following data:

Scenario	Quantity	Price per Product	Total Revenue	Shipping Cost	Tax	Mangpower	Other Cost	Total Expense	Profit
Low Scenario	25,000	Rp 50,000	Rp 1,250,000,000.00	Rp 20,000	10%	130	Rp 2,500,000	Rp 1,050,000,000	Rp 200,000,000
Goal Seek	Profit 500 juta								
Low Scenario	37,000	Rp 50,000	Rp 1,850,000,000.00	Rp 20,000	10%	130	Rp 2,500,000	Rp 1,350,000,000	Rp 500,000,000

The 'Goal Seek' dialog box is open, showing the following information:

- Goal Seeking with Cell D26 found a solution.
- Target value: 500000000
- Current value: Rp500,000,000

The 'What-If' tab is active in the ribbon, and the 'Goal Seek' button is visible in the 'Data' tab.