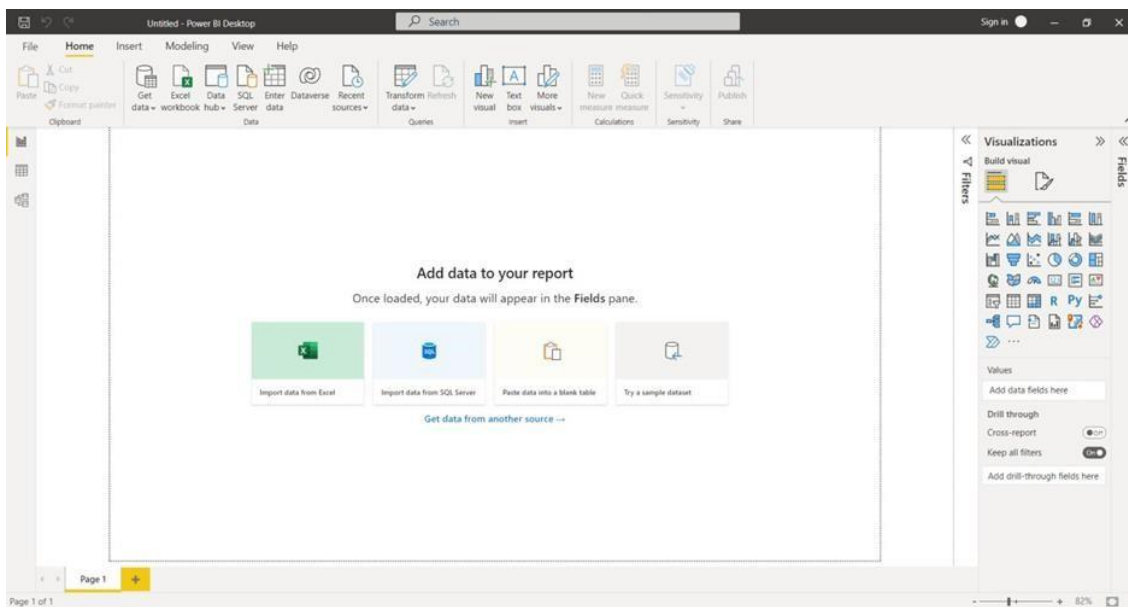


Nama : Yesaya Alehandro Silalahi  
NIM : 191402096  
KOM : C

## Microsoft Power BI

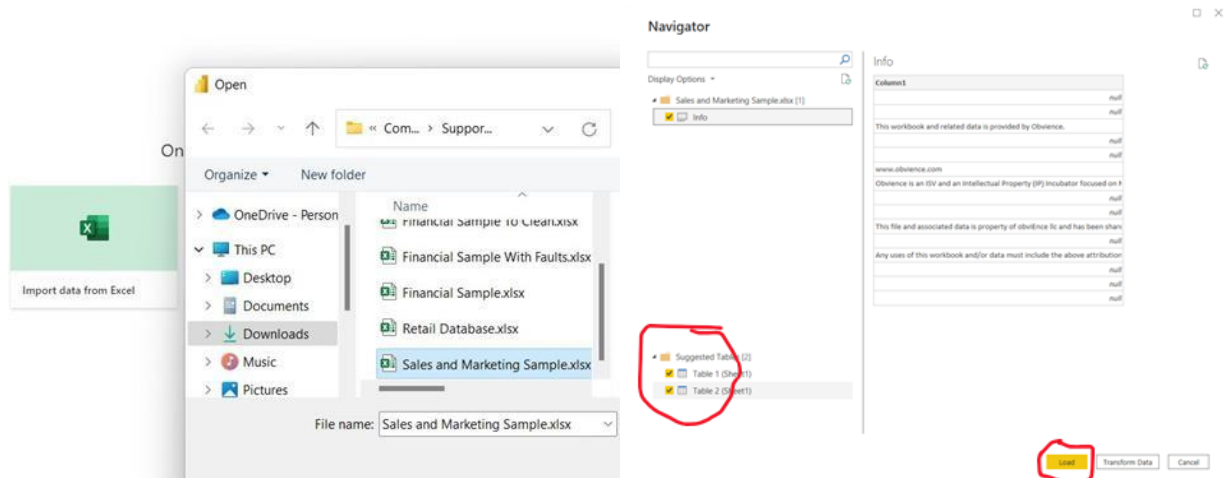
PowerBI adalah product software yang berfungsi untuk melakukan penggabungan, menganalisis, membuat visualisasi, dan membagikan data yang dikemas dalam tampilan yang intuitif. Tak hanya itu, Power BI sangat terintegrasi dengan Excel, Azure, dan produk-produk Microsoft lainnya. Ini tentu memudahkan proses pengolahan data.

- **Tampilan Halaman Awal dari Power BI**



- **Input Data**

Untuk menginput data kedalam PowerBI adalah dengan mengklik Button Get Data pada PowerBI, lalu klik Import Data From Excel, Select Table, dan data berhasil diinput kedalam PowerBI.



PowerBI sendiri memiliki banyak fitur yang terdapat didalamnya seperti Visualisasi Data, Transform Isi data, dsb.

- **Melihat Isi Data**

Untitled - Power BI Desktop

File Home Help **Table tools**

Name Table 1 (Sheet1)

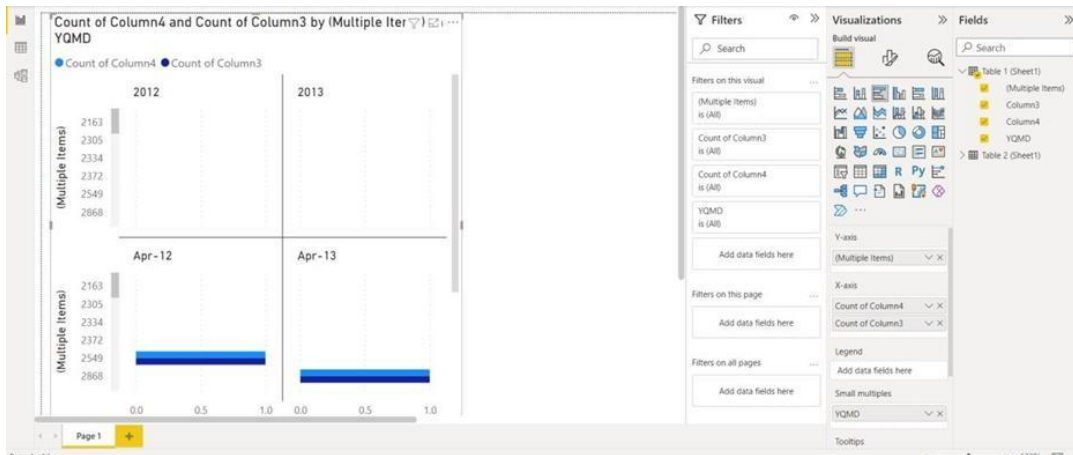
Mark as date table Calendars Manage relationships Relationships New measure

Structure

YQMD	(Multiple Items)	Column3	Column4
Region	All		
Row Labels	Total Units	Total Units R12Ms	Total Units YTD
2012	49058	49058	49058
Jan-12	4327	48565	4327
Feb-12	4235	48343	8562
Mar-12	3262	48181	11824
Apr-12	2549	47936	14373
May-12	2334	48027	16707
Jun-12	3438	48112	20145

○

## Visualisasi Data



- Power Query Editor yang memiliki fungsi untuk mengolah data dengan mudah pada PowerBI

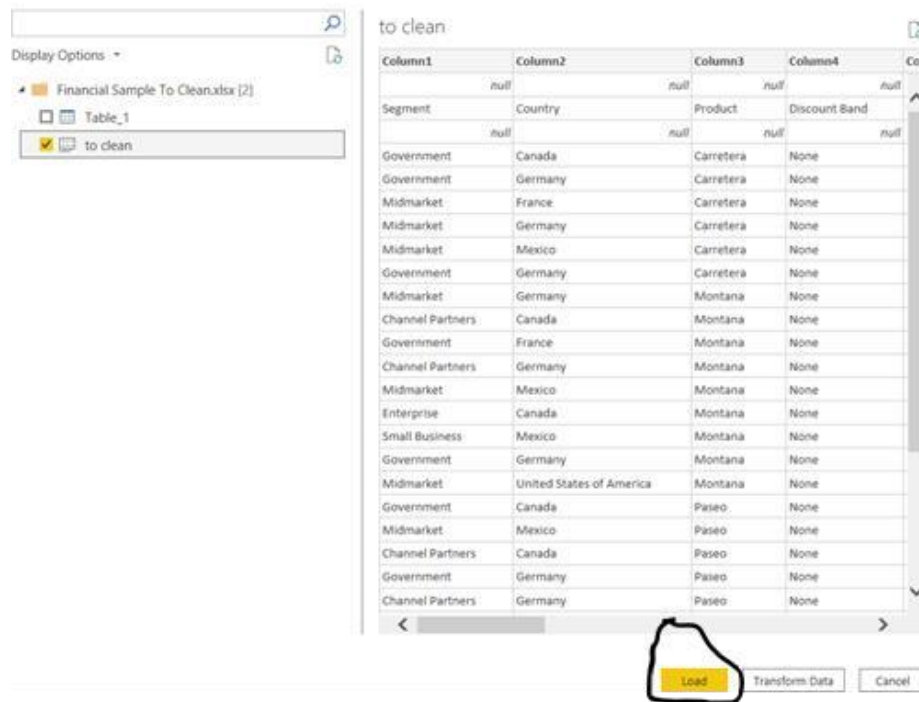
The screenshot shows the Power Query Editor interface. The main view displays a table with the following columns: YQMD, (Multiple Items), Column3, and Column4. The table contains data for the years 2012 and 2013, with rows for each month from Jan-12 to Dec-13. The "Grand Total" row shows the sum of the counts for each column.

YQMD	(Multiple Items)	Column3	Column4
2012		49058	49058
Jan-12		4327	4327
Feb-12		4235	4343
Mar-12		3262	48181
Apr-12		2549	47936
May-12		2334	48027
Jun-12		3438	48112
Jul-12		2303	48568
Aug-12		3270	49003
Sep-12		6457	48784
Oct-12		5660	48963
Nov-12		5893	49060
Dec-12		5328	49058
2013		47250	47250
Jan-13		4202	48933
Feb-13		4034	48732
Mar-13		3405	48875
Apr-13		2868	49194
May-13		2372	49232
Jun-13		3564	49338
Jul-13		2163	49216
Aug-13		2874	48820
Sep-13		4915	47278
Oct-13		5560	47178
Nov-13		5981	47266
Dec-13		5312	47250
Grand Total		96308	47250

○

## Menghapus data Yang tidak Perlu

### Navigator



○ Masukkan data kedalam Tabel

Queries [3]

Table 1 (Sheet1)

Table 2 (Sheet1)

to clean

Table.TransformColumnTypes(#"to clean\_Sheet1",{"Column1", type text}, {"Column2", type text}, {"Column3", type text}, {"Column4", type text}, {"Column5", type text}, {"Column6", type text}, {"Column7", type text}, {"Column8", type text}, {"Column9", type text})

Column1	Column2	Column3	Column4	Column5	Column6	Column7	Column8	Column9
Segment	Country	Product	Discount Band	Units Sold	Manufacturing Price	Sale Price		
Government	Canada	Carretera	None	1618.5				
Government	Germany	Carretera	None	1321				
Midmarket	France	Carretera	None	2178				
Midmarket	Germany	Carretera	None	888				
Midmarket	Mexico	Carretera	None	2470				
Government	Germany	Carretera	None	1513				
Midmarket	Germany	Montana	None	921				
Channel Partners	Canada	Montana	None	2518				
Government	France	Montana	None	1899				
Channel Partners	Germany	Montana	None	1545				
Midmarket	Mexico	Montana	None	2470				
Enterprise	Canada	Montana	None	2665.5				

- Disini data belum memiliki Label, untuk membuat label pada data kita bisa menekan Tombol use first row as Headers hingga Data dapat Dilabel dengan sempurna

Segment	Country	Product	Discount Band	Units Sold	Manufacturing Price	Sale Price
1	Government	Canada	Carretera	None	1618,5	3
2	Government	Germany	Carretera	None	1321	3
3	Midmarket	France	Carretera	None	2178	3
4	Midmarket	Germany	Carretera	None	888	3
5	Midmarket	Mexico	Carretera	None	2470	3
6	Government	Germany	Carretera	None	1513	3
7	Midmarket	Germany	Montana	None	921	5
8	Channel Partners	Canada	Montana	None	2518	5
9	Government	France	Montana	None	1899	5
10	Channel Partners	Germany	Montana	None	1545	5
11	Midmarket	Mexico	Montana	None	2470	5
12	Enterprise	Canada	Montana	None	2665,5	5

- Ketika posisi header data sudah pas, data bisa lebih mudah diolah. Namun disini terdapat kendala dimana ada baris null pada data, untuk menghapus baris null dapat dilakukan dengan menekan tombol Remove Rows, lalu menekan tombol Remove Top Rows

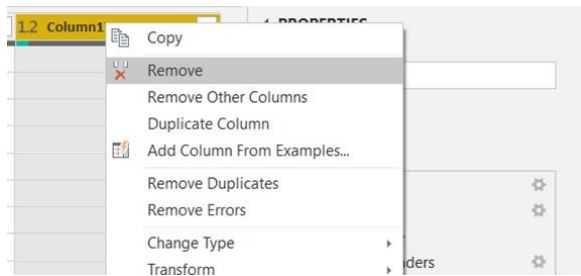
Profit	Date	Month Info	Year	Column17
1	null	null	null	null
2	16185	16185	01/01/2014	
3	13210	13210	01/01/2014	
4	21780	10890	01/06/2014	
5	8880	4440	01/06/2014	
6	24700	12350	01/06/2014	
7	393380	136170	01/12/2014	
8	9210	4605	01/03/2014	
9	7554	22662	01/06/2014	

- Setelah data diremove, bis akita lihat tampilan data sesuai dengan yang dibawah ini

Segment	Country	Product	Discount Band	Units Sold	Manufacturing Price	Sale Price
1	Government	Canada	Carretera	None	1618,5	3
2	Government	Germany	Carretera	None	1321	3
3	Midmarket	France	Carretera	None	2178	3
4	Midmarket	Germany	Carretera	None	888	3
5	Midmarket	Mexico	Carretera	None	2470	3
6	Government	Germany	Carretera	None	1513	3
7	Midmarket	Germany	Montana	None	921	5
8	Channel Partners	Canada	Montana	None	2518	5
9	Government	France	Montana	None	1899	5
10	Channel Partners	Germany	Montana	None	1545	5
11	Midmarket	Mexico	Montana	None	2470	5
12	Enterprise	Canada	Montana	None	2665,5	5

Pada Akhir data, terdapat Kolom yang tidak berlabel dan berisikan data, untuk menghapus kolom tersebut dapat menekan kolom yang dihapus dan drop kolom dengan klik Remove Columns

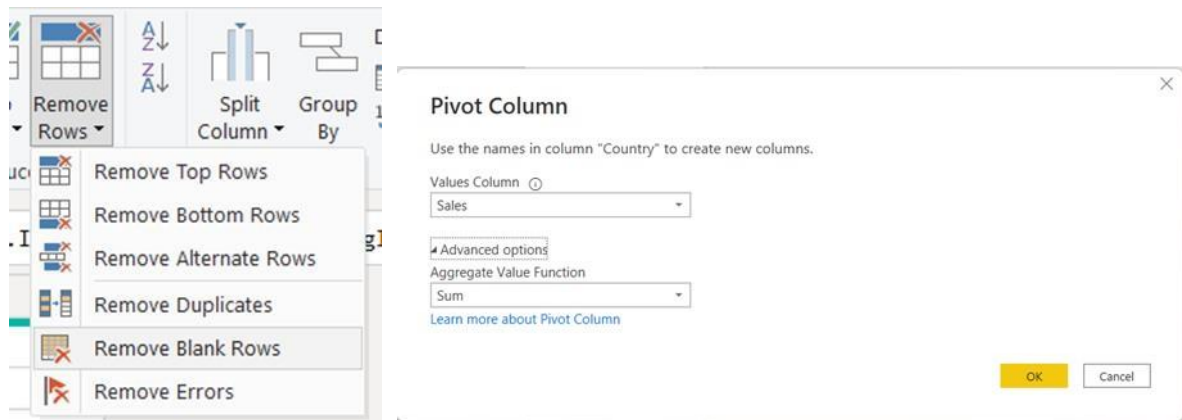
○



Month Number	Month Name	Year
1	January	2014
1	January	2014
6	June	2014
6	June	2014
6	June	2014
12	December	2014
3	March	2014
6	June	2014
6	June	2014
6	June	2014
6	June	2014
7	July	2014

## • Pivoting Data

Setelah data diolah, kita akan menyatukan data (Pivoting Data) agar data lebih terstruktur dan mudah untuk diolah. Sebelum melakukan Pivoting data, kita harus menghapus variabel kosong (null) dengan cara drop table yang berisikan data null.



**Pivot Column**

Use the names in column "Country" to create new columns.

Values Column: Sales

Advanced options

Aggregate Value Function: Sum

[Learn more about Pivot Column](#)

OK Cancel

## • Remove Data

Setelah data selesai di Pivot, tampilan data menjadi seperti ini.

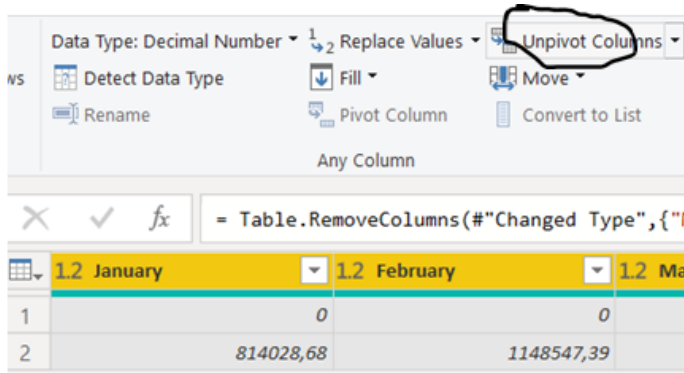
= Table.Pivot(#"Removed Blank Rows", List.Distinct(#"Removed Blank Rows"[Country]), "Country", "Sales", List.Sum)

Segment	Canada	Germany	France	Mexico	United States of America
1 Channel Partners	491164,14	336425,88	372090,36	234379,08	366534,18
2 Enterprise	3967491,25	4086826,25	3890890,625	3315881,25	4350605
3 Government	10741236,52	11452895,94	12127782,72	9791599,38	8390746,11
4 Midmarket	510213,975	301344,75	593802,075	511136,4	465385,875
5 Small Business	9177549	7327848	7369606,5	7096356	11456559

□

## Unpivoting Data

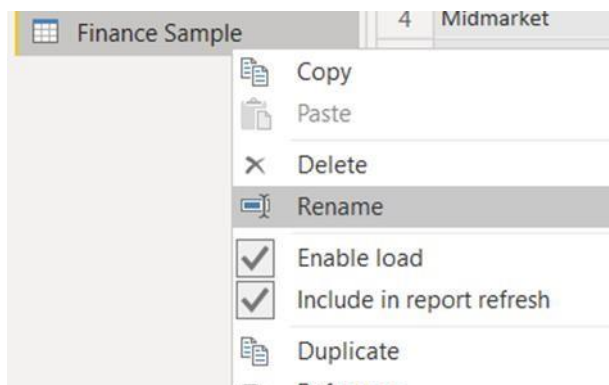
Ada beberapa jenis data yang terlanjur di Pivot namun setelah di Pivot data tidak bisa diolah dan harus dilakukan Unpivoting data. Untuk Mengunpivot data bisa dengan mengklik Transform, lalu Unpivot data



	1.2 Attribute	1.2 Value
1	January	0
2	February	0
3	March	0
4	April	0
5	May	0
6	June	0
7	July	0
8	August	0
9	September	763603,03
10	October	1657795,1
11	November	765502,3
12	December	601551,08

- **Rename Table**

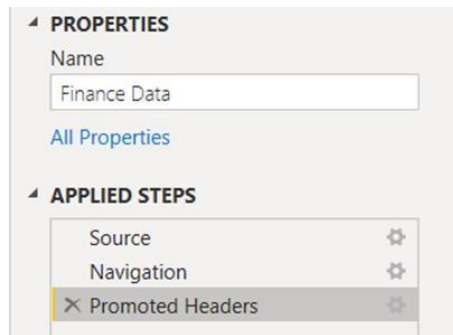
Table bisa direname dengan klik kanan lalu Rename Table.





### Step Back (Redo)

Ada kalanya kita harus me-Redo data yang sudah diolah, untuk mengembalikan data keposisi awal bisa dengan klik tanda silang dibawah ini.



- **Change Data Value**

Untuk mengubah/memperbaiki Value data, bisa dengan mengklik Replace Values, lalu mengubah value seperti dibawah ini.

December	2014
December	2014
Mach	2014
May	2014

## Replace Values

Replace one value with another in the selected columns.

Value To Find

Replace With

> Advanced options

OK Cancel

## Replace Values

Replace one value with another in the selected columns.

Value To Find

null

Replace With

Unknown

> Advanced options

OK Cancel

[illegible]



□

## Jenis Table

Jenis Table yang diinput dalam PowerBI adalah berbentuk text, dimana jika table berbentuk text angka yang terdapat didalamnya tidak bisa diolah. Untuk mengolahnya, kita bisa mengubah table yang berjenis Text menjadi Decimal Number dengan cara dibawah ini

The screenshot shows the PowerBI ribbon with the 'Data Type' dropdown menu open. The menu lists various data types: Decimal Number, Fixed decimal number, Whole Number, Percentage, Date/Time, Date, Time, Date/Time/Timezone, Duration, Text, True/False, Binary, and Blank. The 'Decimal Number' option is highlighted. In the background, a table is visible with columns: Discount Volume, Units Sold, Manufacturing Price, and Sale Price. The 'Manufacturing Price' column is highlighted in yellow, and a dropdown menu for it is open, showing '1.2 Decimal Number' as the selected option.

Discount Volume	Units Sold	Manufacturing Price	Sale Price
one	1618,5	20	20
one	1321	20	20
one	2178	15	15
one	888	3	15
one	2470	3	15
one	1513	3	350
one	921	5	15
one	2518	5	12
one	1899	5	20

- **Merge Data**

Pada PowerBI, terdapat fitur untuk menggabungkan 2 buah tabel yaitu merge dan append table. Append table adalah mensisipkan table ke table utama

□

Untitled - Power Query Editor

File Home Transform Add Column View Tools Help

Close & Apply \* New Source \* Recent Sources \* Enter Data \* Data source settings \* Manage Parameters \* Refresh Preview \* Manage \* Query \* Choose Columns \* Remove Columns \* Manage Columns \* Keep Rows \* Remove Rows \* Reduce Rows \* Sort \* Split Column \* Group By \* Data Type: Text \* Use First Row as Headers \* Replace Values \* Transform \* Merge Queries \* Append Queries \* Combine Files \* Azure Machine Learning \* Test Analytics \* Vision \* AI Insights

Queries [8]

Table 1 (Sheet1)

Table 2 (Sheet1)

to clean

horizontal

Finance Data

Germany

France

Mexico

Table.TransformColumnTypes(\*Promoted Headers\*,({{"Segment", type text}, {"Country", type text}, {"Product", type text}, {"Discount Band", type text}, {"Units Sold", type number}, {"Manufacturing Price", type number}, {"Sale Price", type number}}))

	Segment	Country	Product	Discount Band	Units Sold	Manufacturing Price	Sale Price
1.	Government	Germany	Carretera	None	2321	3	
2.	Midmarket	Germany	Carretera	None	888	3	
3.	Government	Germany	Carretera	None	1513	3	
4.	Midmarket	Germany	Montana	None	921	5	
5.	Channel Partners	Germany	Montana	None	1545	5	
6.	Government	Germany	Montana	None	2146	5	
7.	Government	Germany	Paseo	None	1006	10	
8.	Channel Partners	Germany	Paseo	None	367	10	

Merge Queries

Append Queries

Combine Files

Combine

## Append

Concatenate rows from three or more tables into a single table.

☐ Two tables
 ☒ Three or more tables

Available tables

- Germany (Current)
- Table 1 (Sheet1)
- Table 2 (Sheet1)
- to clean
- horizontal
- Finance Data
- France
- Mexico

Add >>

Tables to append

- Germany (Current)

Tables to append

- Germany (Current)
- France

Table: Table.Combine({#Changed Type", France})

	Segment	Country	Product	Discount Band	Units Sold	Manufacturing Price	Sale Price
1	Government	Germany	Carretera	None	1322	3	
2	Midmarket	Germany	Carretera	None	888	3	
3	Government	Germany	Carretera	None	1513	3	
4	Midmarket	Germany	Montana	None	921	5	
5	Channel Partners	Germany	Montana	None	1545	5	
6	Government	Germany	Montana	None	2146	5	
7	Government	Germany	Paseo	None	1006	10	
8	Channel Partners	Germany	Paseo	None	367	10	
9	Midmarket	France	Carretera	None	2178	3	
10	Government	France	Montana	None	1899	5	
11	Enterprise	France	Velo	None	1804	120	
12	Midmarket	France	VTT	None	2178	250	
13	Small Business	France	VTT	None	2151	250	
14	Government	France	Amarilla	None	2750	260	

Query Settings

**PROPERTIES**

Name: Germany

**APPLIED STEPS**

- Source
- Navigation
- Promoted Headers
- Changed Type
- Appended Query

Bisa kita lihat tabel France sudah disisip kedalam table Germany. Jangan lupa untuk merename table menjadi France-Germany

France-Germany	5	C
France	6	C
Mexico	7	C
Query1	8	C
	9	M

Disini saya juga memasukkan table Mexico didalam, namun bisa dilihat data dari Table Mexico bersikan null. Untuk drop isi data table mexico bisa menekan tombol X pada Applied Steps

Segment	Country	Product	Discount Band	Units Sold	Manufacturing Price	Sale Price
1 Government	Germany	Carretera	None	1321	3	
2 Midmarket	Germany	Carretera	None	888	3	
3 Government	Germany	Carretera	None	1513	3	
4 Midmarket	Germany	Montana	None	921	5	
5 Channel Partners	Germany	Montana	None	1545	5	
6 Government	Germany	Montana	None	2146	5	
7 Government	Germany	Paseo	None	1006	10	
8 Channel Partners	Germany	Paseo	None	367	10	
9 Midmarket	France	Carretera	None	2178	3	
10 Government	France	Montana	None	1899	5	
11 Enterprise	France	Velo	None	1804	120	
12 Midmarket	France	VTT	None	2178	250	
13 Small Business	France	VTT	None	2151	250	
14 Government	France	Amarilla	None	2750	260	
15	null	null	null	null	null	null
16	null	null	null	null	null	null
17	null	null	null	null	null	null
18	null	null	null	null	null	null
19	null	null	null	null	null	null
20	null	null	null	null	null	null

PROPERTIES

Name

Germany

All Properties

APPLIED STEPS

Source

Navigation

Promoted Headers

Changed Type

Appended Query

Appended Query1

Table.Combine({"Changed Type", France})

Segment	Country	Product	Discount Band	Units Sold	Manufacturing Price	Sale Price
1 Government	Germany	Carretera	None	1321	3	
2 Midmarket	Germany	Carretera	None	888	3	
3 Government	Germany	Carretera	None	1513	3	
4 Midmarket	Germany	Montana	None	921	5	
5 Channel Partners	Germany	Montana	None	1545	5	
6 Government	Germany	Montana	None	2146	5	
7 Government	Germany	Paseo	None	1006	10	
8 Channel Partners	Germany	Paseo	None	367	10	
9 Midmarket	France	Carretera	None	2178	3	
10 Government	France	Montana	None	1899	5	
11 Enterprise	France	Velo	None	1804	120	
12 Midmarket	France	VTT	None	2178	250	
13 Small Business	France	VTT	None	2151	250	
14 Government	France	Amarilla	None	2750	260	

Query Settings

PROPERTIES

Name

France-Germany

All Properties

APPLIED STEPS

Source

Navigation

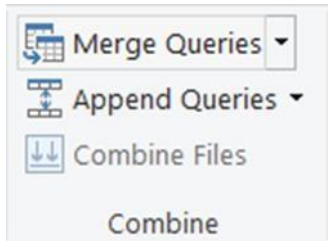
Promoted Headers

Changed Type

Appended Query

- **Merge Table**

Merge Table ialah menyatukan 2 buah jenis table kedalam 1 Table. Bisa dilakukan dengan menekan tombol Merge Queries



×

Merge

Select a table and matching columns to create a merged table.

Sales\_SalesOrderHeader (2)

PurchaseOrderNumber	AccountNumber	CustomerID	ContactID	SalesPersonID	TerritoryID	BillToA
PO522145787	10-4020-000676	676	378	279	5	
PO18850127500	10-4020-000117	117	216	279	5	
PO18473189620	10-4020-000442	442	281	282	6	
PO18444174044	10-4020-000227	227	564	282	6	

Sales\_Customer

CustomerID	TerritoryID	AccountNumber	CustomerType	rowguid	Mod
1	1	AW00000001	S	{3F5AE95E-B87D-4AED-95B4-C3797AFCB74F}	13/10/
2	1	AW00000002	S	{E552F657-A9AF-4A7D-A645-C429D6E02491}	13/10/
3	4	AW00000003	S	{130774B1-DB21-4EF3-98C8-C104BCD6ED6D}	13/10/
4	4	AW00000004	S	{FF862851-1DAA-4044-BE7C-3E85583C054D}	13/10/

Join Kind

Inner (only matching rows)

☐ Use fuzzy matching to perform the merge

Fuzzy matching options

Similarity threshold (optional)

☒ Ignore case
 ☒ Match by combining text parts

✓ The selection matches 5199 of 5199 rows from the first table, and 4173 of...

OK

Cancel

Untuk menggabungkan 2 buah jenis table, kita harus melihat persamaan dari kedua dataset table tersebut. Bisa dilihat kalau kedua data memiliki kesamaan pada CustomerID sehingga data dicluster dan diurutkan dengan menjadikan CustomerID sebagai patokan data dan berikut hasil data Ketika sudah di Merge

ABC 123	Comment	rowguid	ModifiedDate	ContactFirstName	ContactLastName	Sales_Customer
		null {79B65321-39CA-4115-9CBA-8FE0903E12E...	08/07/2001	James	Hendergart	Table
		null {AE51074C-108B-4274-BB03-87D670DDDB2...	08/10/2001	James	Hendergart	Table
		null {270EB149-81E2-4564-9CA6-8A4502C08A...	08/01/2002	James	Hendergart	Table
		null {5943CC34-5DC6-4CBB-80CB-4DE01571E5...	08/04/2002	James	Hendergart	Table
		null {039F4B9C-19AC-4B60-B6B2-A5D66459A2...	08/07/2002	James	Hendergart	Table
		null {0D6915F7-F25B-4310-9BB6-E68222CE25A...	08/10/2002	James	Hendergart	Table
		null {10354519-180B-40B8-8FC1-347DE19B541...	08/01/2003	James	Hendergart	Table
		null {D2745233-B05B-409C-93BB-4451569F42...	08/08/2001	Orlando	Gee	Table
		null {1A116F86-71E4-40A2-A32C-4938D8977D...	08/11/2001	Orlando	Gee	Table
		null {F57AB920-675E-4B1D-B43C-8EA091CF6F...	08/02/2002	Orlando	Gee	Table
		null {62991BDA-C42D-494F-9EF1-2754BEC25F...	08/05/2002	Orlando	Gee	Table
		null {738DC42D-D03B-48A1-9822-F95A67EA73...	08/07/2001	Takiko	Collins	Table
		null {BB901788-017A-4714-8E6A-717A64299D...	08/10/2002	Takiko	Collins	Table
		null {8A533BE6-0669-470A-B361-796DD1CD0E...	08/08/2002	Keith	Harris	Table
		null {1FAAD98B-1DE0-4B80-A804-9FBBB6F289...	08/11/2002	Keith	Harris	Table
		null {D91B9131-18A4-4A11-BC3A-90B6F53E9D...	08/07/2001	Jauna	Elson	Table
		null {181D7624-F907-41B6-90B8-B95899CA2B...	08/10/2001	Jauna	Elson	Table
		null {2C419B24-B1F6-4D9D-B2BF-1E68389B47...	08/01/2002	Jauna	Elson	Table
		null {E2DB78F0-AB7A-4755-87BE-ED52B478A8...	08/04/2002	Jauna	Elson	Table
		null {61DF816F-0422-4A7A-9F94-C50FF7FF4D5...	08/07/2002	Jauna	Elson	Table
		null {EE498ACF-F522-4937-AB69-BAD7D86ADE...	08/10/2002	Jauna	Elson	Table
		null {9D07E19C-0672-42E6-BC61-765BCEED32...	08/01/2003	Jauna	Elson	Table
		null {0F0EB783-FA76-466D-9A0A-2F88C1C7ED...	08/09/2001	Donna	Carreras	Table
		null {9718B3AD-7806-49F0-BC15-CE6097D629...	08/12/2001	Donna	Carreras	Table
		null {4AD60909-9C6D-4A8B-A333-A35AD0EFC9...	08/03/2002	Donna	Carreras	Table
		null {C7B82642-1411-4EF1-93CA-D2A988BDF9...	08/06/2002	Donna	Carreras	Table
		null {FF062776-9112-49EE-941C-BB2072A41E12}	08/09/2002	Donna	Carreras	Table

Pada PowerBI kita bisa melihat dan membuat relasi antar dua buah jenis database. Yaitu dengan membuat Relationship dari kedua buah data. Untuk membuat Relationship bisa dengan klik new pada manage relationship.

Manage relationships

Active	From: Table (Column)	To: Table (Column)
<input checked="" type="checkbox"/>	Finance Data (Segment)	to clean (Segment)
<input checked="" type="checkbox"/>	France (Segment)	to clean (Segment)
<input checked="" type="checkbox"/>	France-Germany (Segment)	to clean (Segment)
<input checked="" type="checkbox"/>	Person_Address (StateProvinceID)	Person_StateProvince (StateProvinceID)
<input checked="" type="checkbox"/>	Sales_SalesOrderHeader (2) (AccountNumber)	Sales_Customer (AccountNumber)

New...

Autodetect...

Edit...

Delete

Close

## Create relationship

Select tables and columns that are related.

Sales\_SalesOrderHeader (2)

ShipDate	Status	OnlineOrderFlag	SalesOrderNumber	PurchaseOrderNumber	AccountNumber	Cu
14 February 2002	5	-1	SO45389		10-4030-011090	
27 February 2002	5	-1	SO45463		10-4030-011171	
07 March 2002	5	-1	SO45512		10-4030-011175	

Sales\_Customer

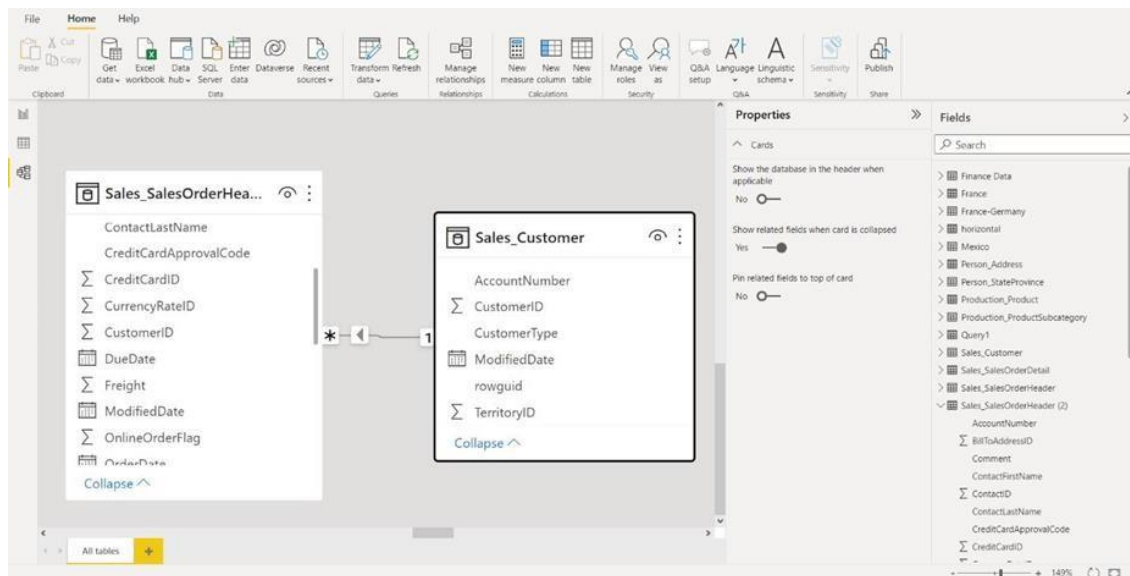
CustomerID	TerritoryID	AccountNumber	CustomerType	rowguid	Modif
11015	4	AW00011015	I	{F791BD74-EB82-4631-B9FC-F9FEE621FD13}	13/10/2
11016	4	AW00011016	I	{023843CA-25FB-42BF-AC37-FAF6F4120DAC}	13/10/2
11023	4	AW00011023	I	{A2833BD8-44A8-4665-808E-33E19ECD7F54}	13/10/2

Cardinality:   
 Cross filter direction:   
 ☐ Make this relationship active   
 ☐ Apply security filter in both directions   
 ☐ Assume referential integrity

There's already a relationship between these two columns.

OK Cancel

Dalam membuat Relationship, kita harus memastikan kedua buah data memiliki keterkaitan antar satu dengan yang lain. Jika bisa dibuat Relations dari kedua data maka data akan ditampilkan sebagai berikut.



Pada PowerBI kita bisa melihat Column Distribution dan Mengubah Query dengan fungsi Advance Director pada PowerBI

The screenshot shows the Power Query Editor window titled 'Untitled - Power Query Editor'. The 'View' tab is active, and the 'Column distribution' checkbox is checked and circled in red. Below the ribbon, a data table is displayed with columns: SalesOrderID, RevisionNumber, OrderDate, DueDate, ShipDate, Status, and OnlineOrderIndicator. Each column has a small bar chart representing its distribution. The 'Advanced Editor' tab is also visible at the bottom.

SalesOrderID	RevisionNumber	OrderDate	DueDate	ShipDate	Status	OnlineOrderIndicator
43659	1	01/07/2001	11/07/2001	08/07/2001	5	
44305	1	01/10/2001	11/10/2001	08/10/2001	5	
45061	1	01/01/2002	11/01/2002	08/01/2002	5	
45779	1	01/04/2002	11/04/2002	08/04/2002	5	
46604	1	01/07/2002	11/07/2002	08/07/2002	5	

## Sales\_SalesOrderHeader (2)

Display Options ?

```
let
    Source = Excel.Workbook(File.Contents("C:\Users\ARANYA\Downloads\Compressed\Support Files\Retail Database.xlsx"), null, true),
    Sales_SalesOrderHeader_Sheet = Source[Item="Sales_SalesOrderHeader", Kind="Sheet"][Data],
    #Promoted Headers = Table.PromoteHeaders(Sales_SalesOrderHeader_Sheet, [PromoteAllScalars=true]),
    #Changed Type = Table.TransformColumnTypes(#Promoted Headers, {{"SalesOrderID", Int64.Type}, {"RevisionNumber", Int64.Type}, {"OrderDate", Date.Type}, {"DueDate", Date.Type}, {"ShipDate", Date.Type}, {"Status", Int64.Type}, {"OnlineOrderIndicator", Int64.Type}},),
    #Merged Queries = Table.NestedJoin(#Changed Type, {"CustomerID"}, Sales_Customer, {"CustomerID"}, "Sales_Customer", JoinKind.Inner)
in
    #Merged Queries
```