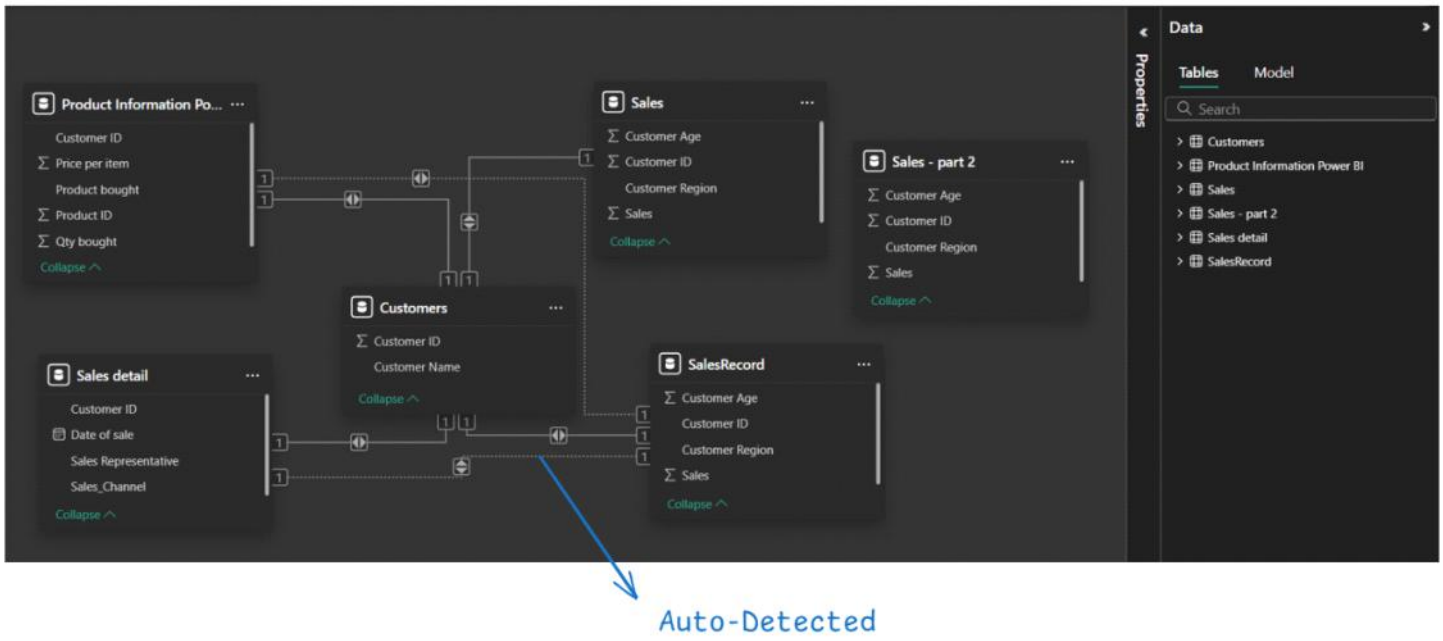
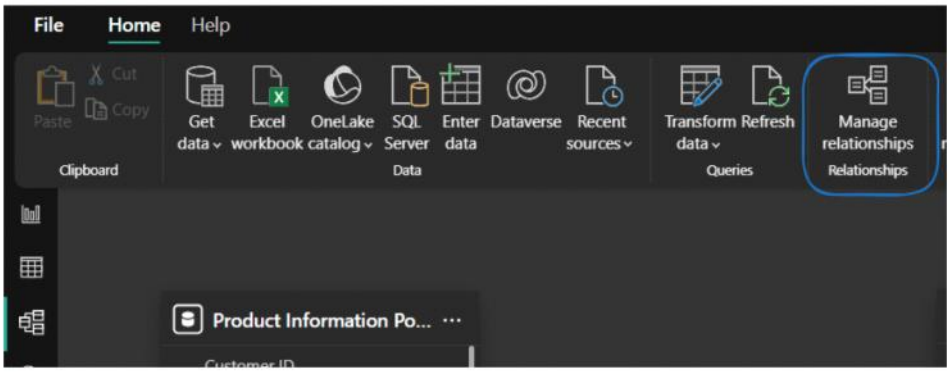
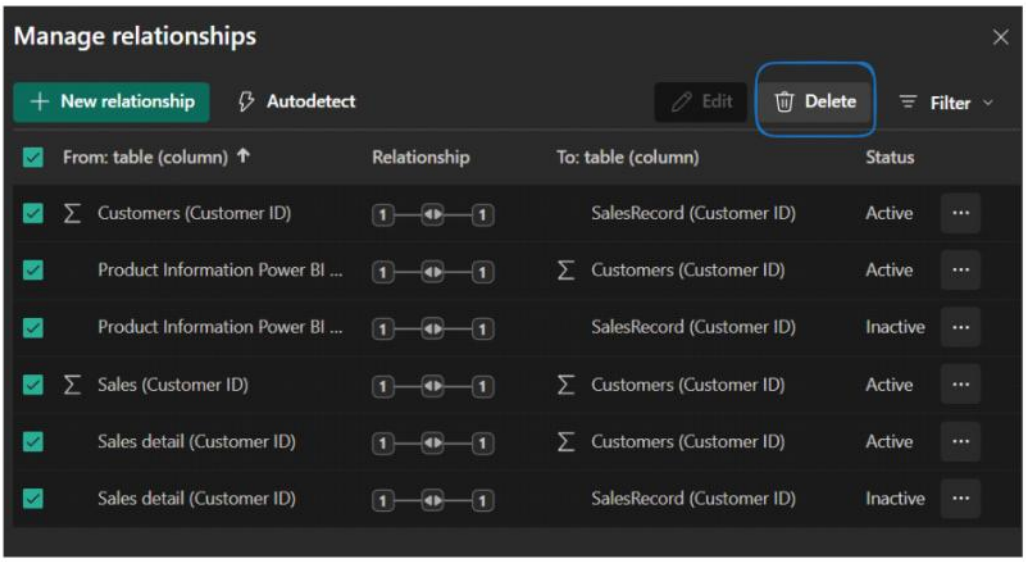
Advanced Power Query and Data Modelling

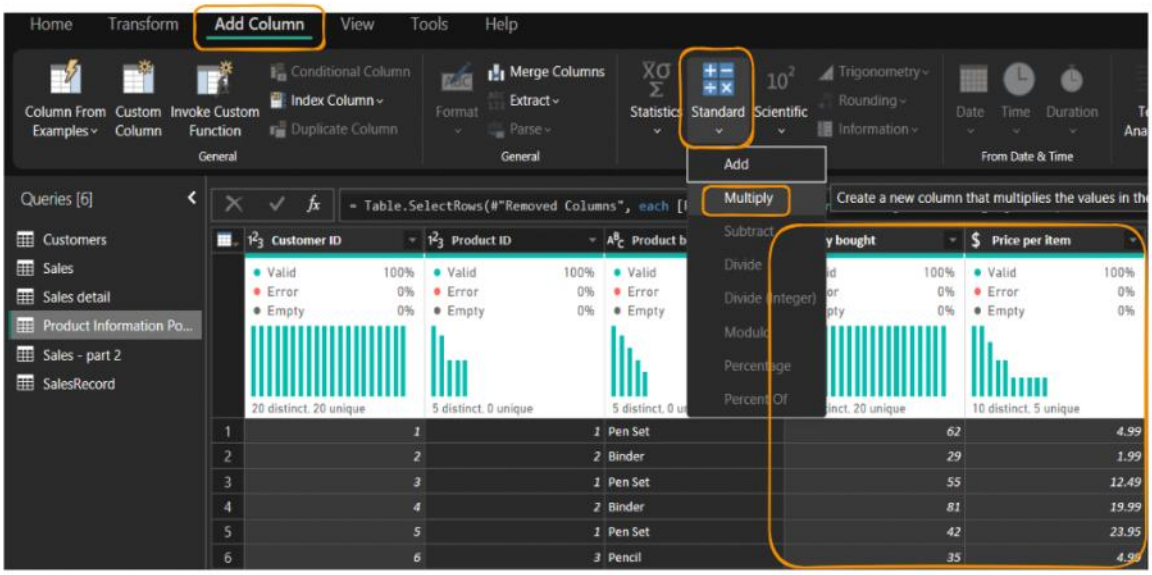


Auto-Detected

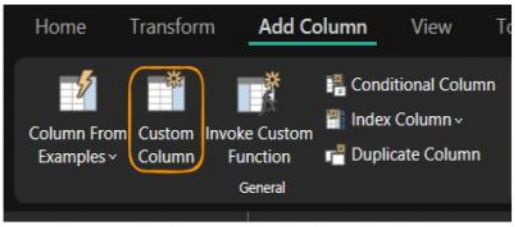


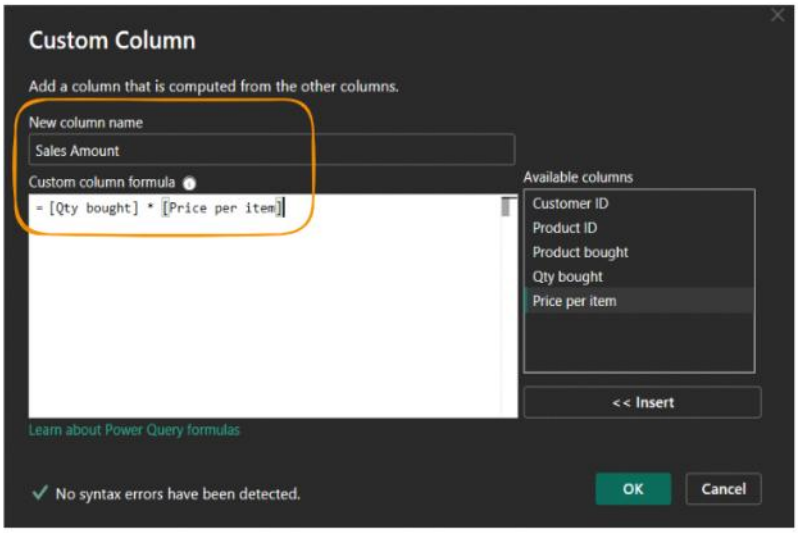


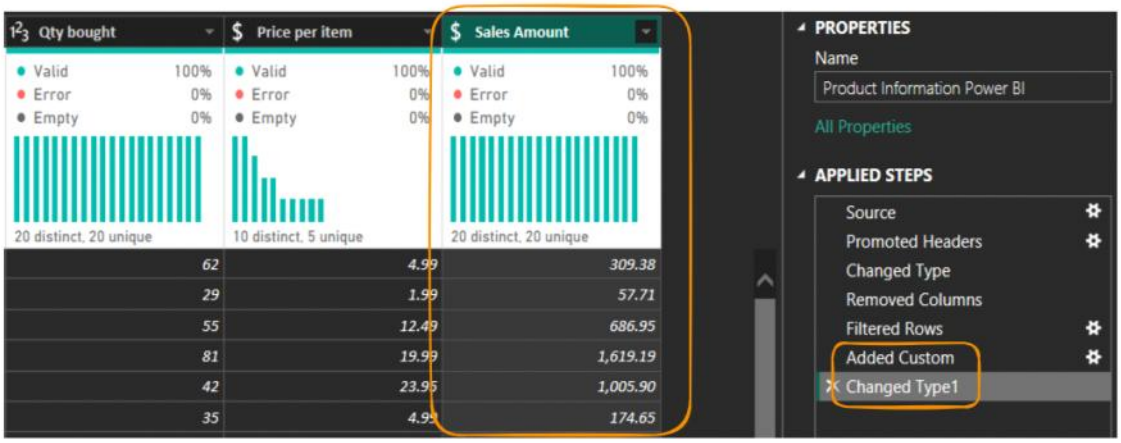
Qty bought	Price per item
Valid 100%	Valid 100%
Error 0%	Error 0%
Empty 0%	Empty 0%
20 distinct, 20 unique	10 distinct, 5 unique
62	4.99
29	1.99
55	12.49
81	19.99
42	23.95
35	4.99
3	275.00
2	125.00
7	1.29
16	15.99
76	1.99
28	8.99
57	19.99
64	8.99
14	1.29
15	19.99
11	4.99
96	4.99
94	19.99
67	1.29

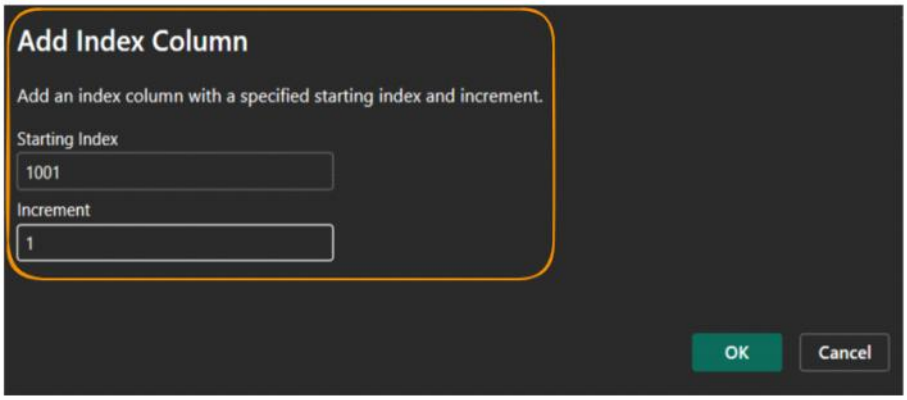


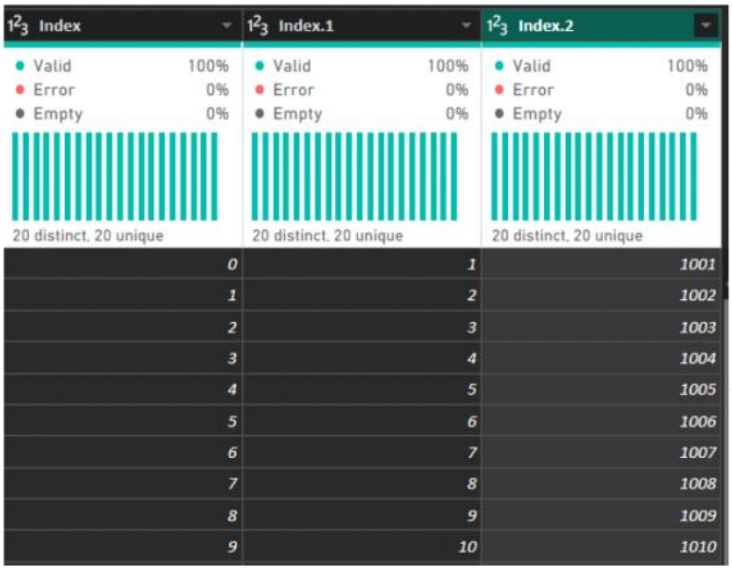
Qty bought	Price per item	Sales Amount
Valid 100%	Valid 100%	Valid 100%
Error 0%	Error 0%	Error 0%
Empty 0%	Empty 0%	Empty 0%
20 distinct, 20 unique	10 distinct, 5 unique	20 distinct, 20 unique
62	4.99	309.38
29	1.99	115.42
55	12.49	2,060.85
81	19.99	6,476.76
42	23.95	5,029.50
35	4.99	1,047.90
3	275.00	5,775.00
2	125.00	2,000.00
7	1.29	81.27


Home
Transform
Add Column
View
Column From Examples
Custom Column
Invoke Custom Function
Conditional Column
Index Column
Duplicate Column
General

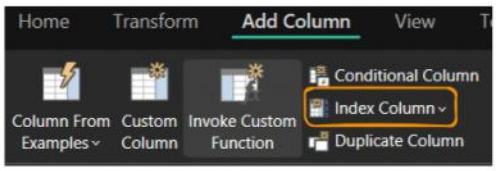

Custom Column
Add a column that is computed from the other columns.
New column name
Sales Amount
Custom column formula
= [Qty bought] * [Price per item]
Available columns
Customer ID
Product ID
Product bought
Qty bought
Price per item
<< Insert
Learn about Power Query formulas
No syntax errors have been detected.
OK
Cancel

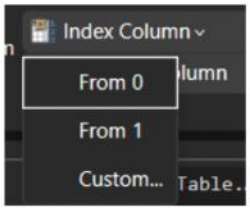

Qty bought
Price per item
Sales Amount
Valid 100%
Error 0%
Empty 0%
20 distinct, 20 unique
10 distinct, 5 unique
62 4.99 309.38
29 1.99 57.71
55 12.49 686.95
81 19.99 1,619.19
42 23.95 1,005.90
35 4.99 174.65
PROPERTIES
Name
Product Information Power BI
All Properties
APPLIED STEPS
Source
Promoted Headers
Changed Type
Removed Columns
Filtered Rows
Added Custom
Changed Type1


Add Index Column
Add an index column with a specified starting index and increment.
Starting Index
1001
Increment
1
OK
Cancel



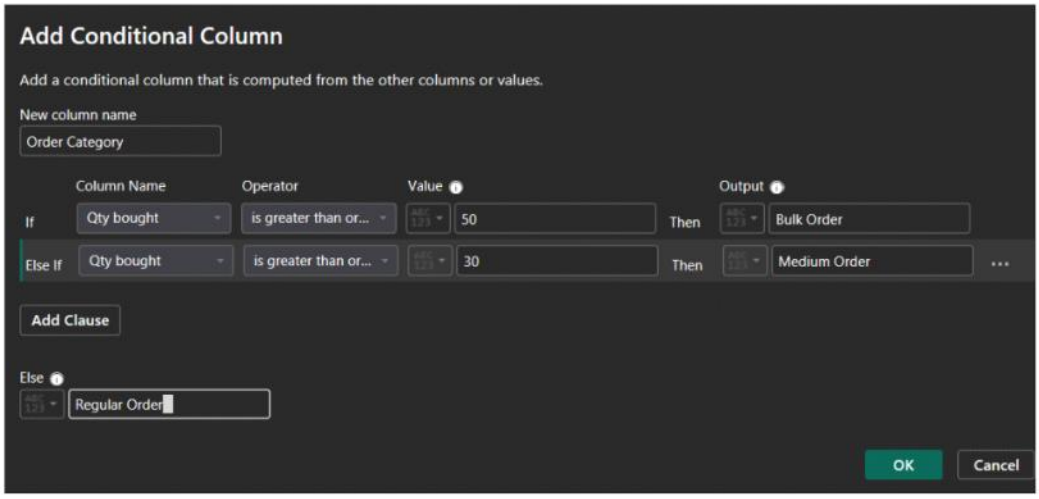
Index	Index.1	Index.2
Valid 100%	Valid 100%	Valid 100%
Error 0%	Error 0%	Error 0%
Empty 0%	Empty 0%	Empty 0%
20 distinct, 20 unique	20 distinct, 20 unique	20 distinct, 20 unique
0	1	1001
1	2	1002
2	3	1003
3	4	1004
4	5	1005
5	6	1006
6	7	1007
7	8	1008
8	9	1009
9	10	1010

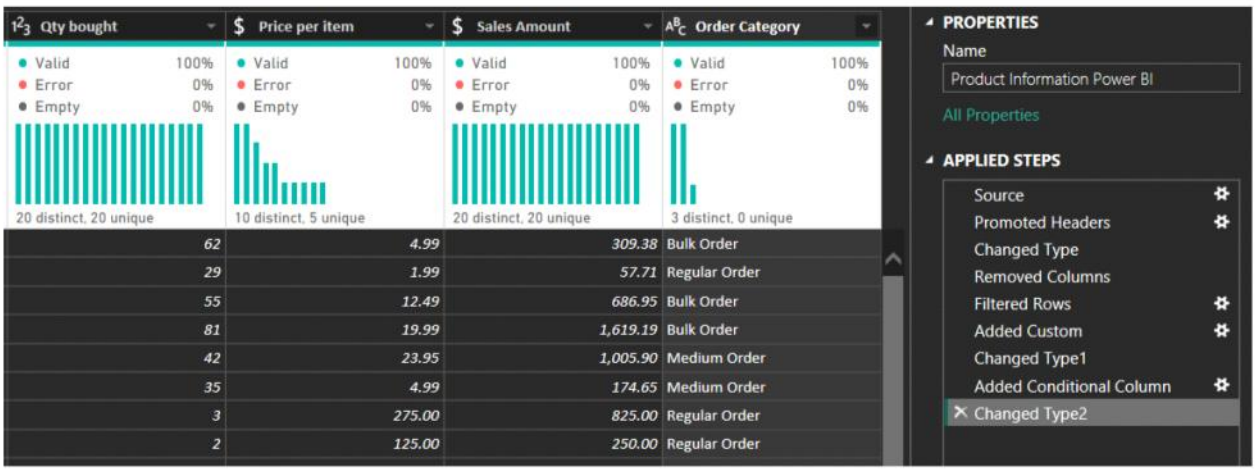




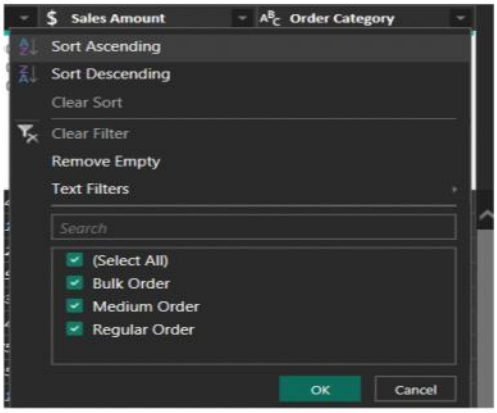
Conditional Columns :

```
Qty >= 50 : "Bulk Order"
Qty >= 30 : 'Medium Order'
Else Qty<30 : 'Regular Order'
```

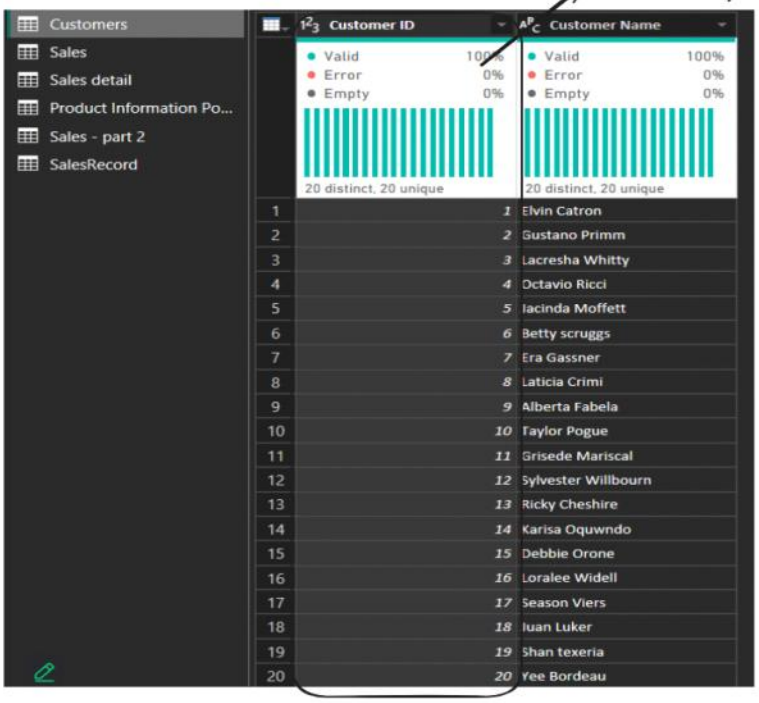


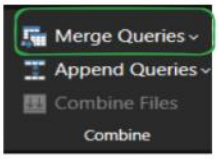


Qty bought	Price per item	Sales Amount	Order Category
Valid 100%	Valid 100%	Valid 100%	Valid 100%
Error 0%	Error 0%	Error 0%	Error 0%
Empty 0%	Empty 0%	Empty 0%	Empty 0%
20 distinct, 20 unique	10 distinct, 5 unique	20 distinct, 20 unique	3 distinct, 0 unique
62	4.99	309.38	Bulk Order
29	1.99	57.71	Regular Order
55	12.49	686.95	Bulk Order
81	19.99	1,619.19	Bulk Order
42	23.95	1,005.90	Medium Order
35	4.99	174.65	Medium Order
3	275.00	825.00	Regular Order
2	125.00	250.00	Regular Order

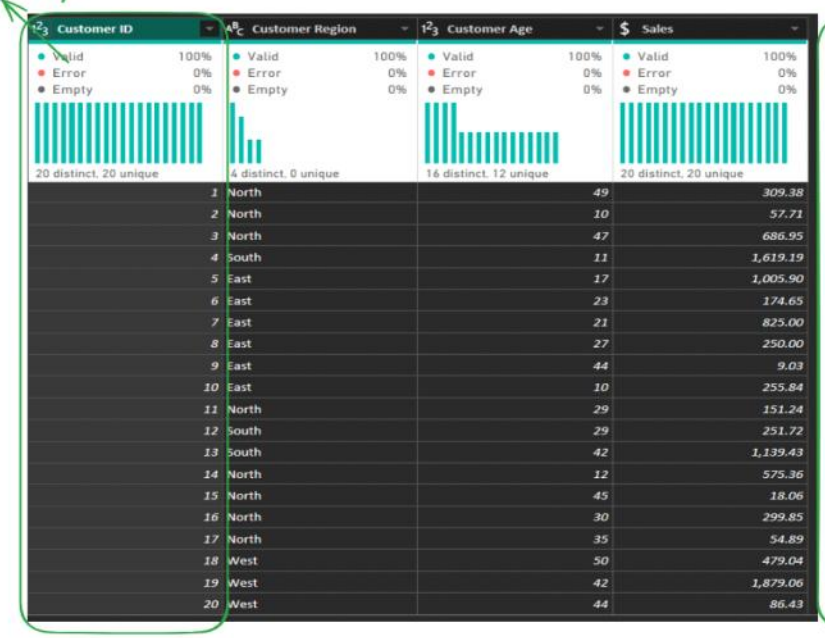


Primary Key [Unique + Not Null]

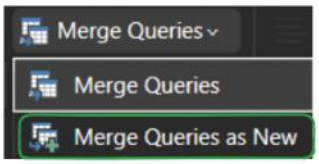


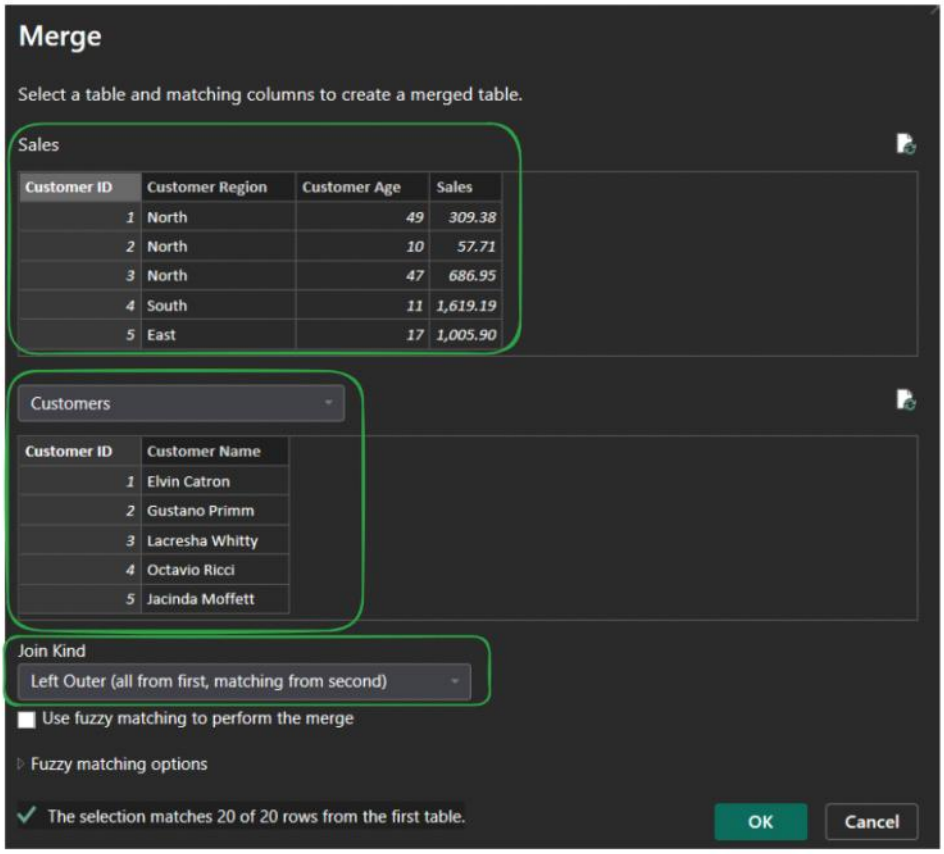


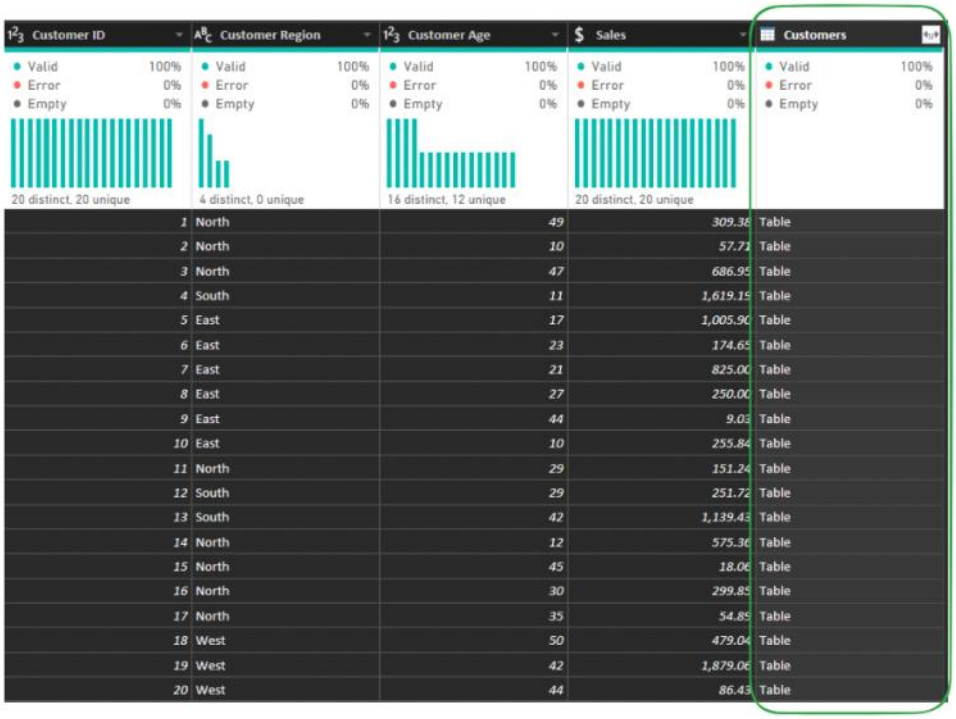
Foreign Key



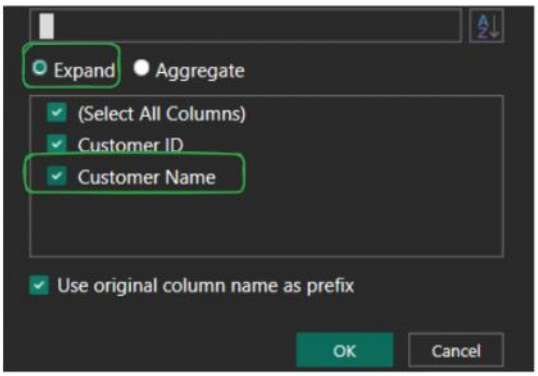
Customer Name





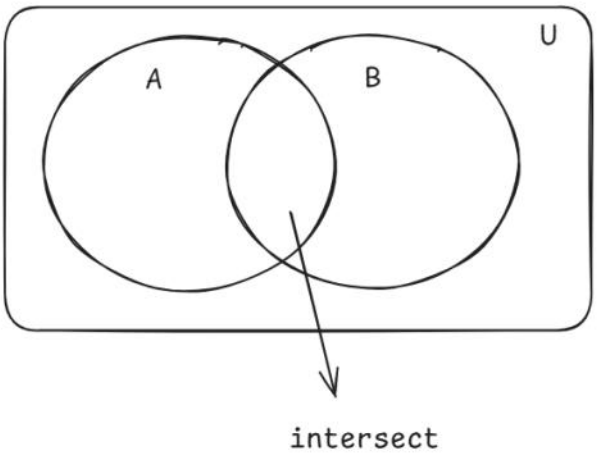


Customer ID	Customer Region	Customer Age	Sales	Customers
Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%
20 distinct, 20 unique	4 distinct, 0 unique	16 distinct, 12 unique	20 distinct, 20 unique	
1	North	49	309.38	Table
2	North	10	57.71	Table
3	North	47	686.95	Table
4	South	11	1,619.19	Table
5	East	17	1,005.90	Table
6	East	23	174.65	Table
7	East	21	825.00	Table
8	East	27	250.00	Table
9	East	44	9.03	Table
10	East	10	255.84	Table
11	North	29	151.24	Table
12	South	29	251.72	Table
13	South	42	1,139.43	Table
14	North	12	575.36	Table
15	North	45	18.06	Table
16	North	30	299.85	Table
17	North	35	54.85	Table
18	West	50	479.04	Table
19	West	42	1,879.06	Table
20	West	44	86.43	Table

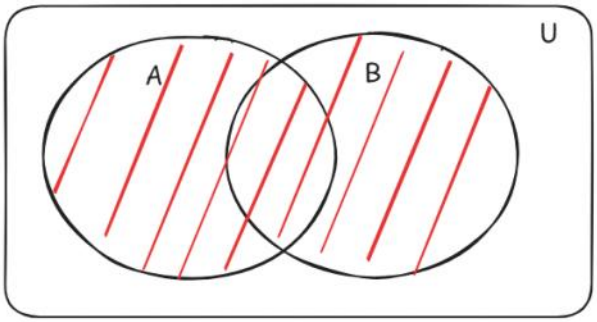


Customer ID	Customer Region	Customer Age	Sales	Customers.Customer Name
Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%
20 distinct, 20 unique	4 distinct, 0 unique	16 distinct, 12 unique	20 distinct, 20 unique	20 distinct, 20 unique
1	North	49	309.38	Elvin Catron
2	North	10	57.71	Gustano Primm
3	North	47	686.95	Lacresha Whitty
4	South	11	1,619.19	Octavio Ricci
5	East	17	1,005.90	Jacinda Moffett
6	East	23	174.65	Betty scruggs
7	East	21	825.00	Era Gassner
8	East	27	250.00	Laticia Crimi
9	East	44	9.03	Alberta Fabela
10	East	10	255.84	Taylor Pogue
11	North	29	151.24	Grisede Mariscal
12	South	29	251.72	Sylvester Willbourn
13	South	42	1,139.43	Ricky Cheshire
14	North	12	575.36	Karisa Oquwndo
15	North	45	18.06	Debbie Orone
16	North	30	299.85	Loralee Widell
17	North	35	54.89	Season Viers
18	West	50	479.04	Juan Luker
19	West	42	1,879.06	Shan texeria
20	West	44	86.43	Yee Bordeau

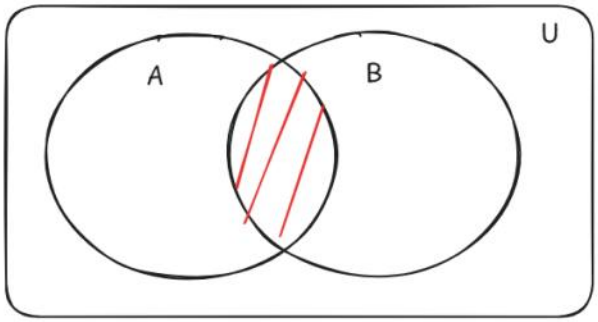
Joins

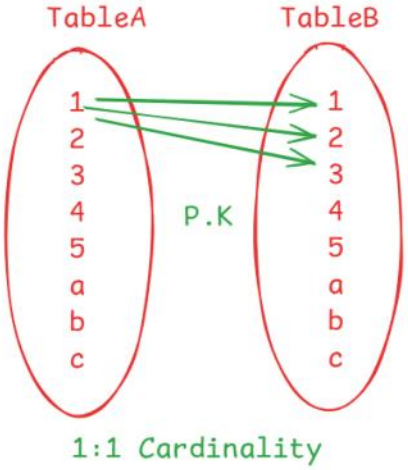


Full JOIN

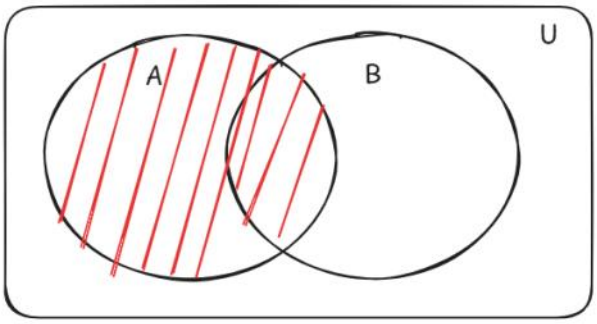


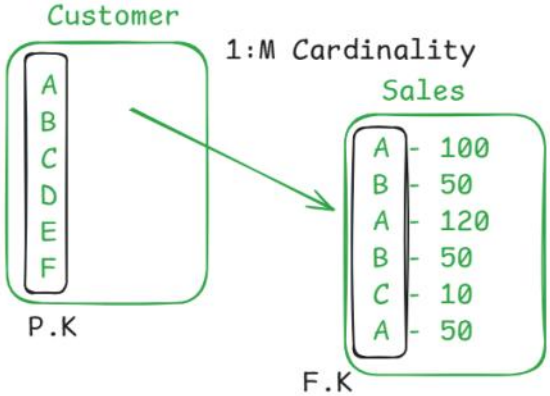
Inner Join





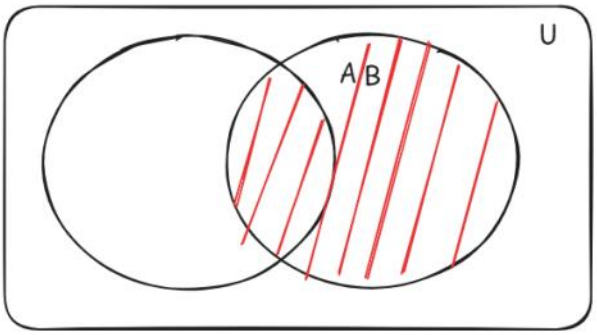
Left Join

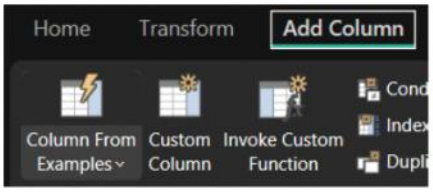




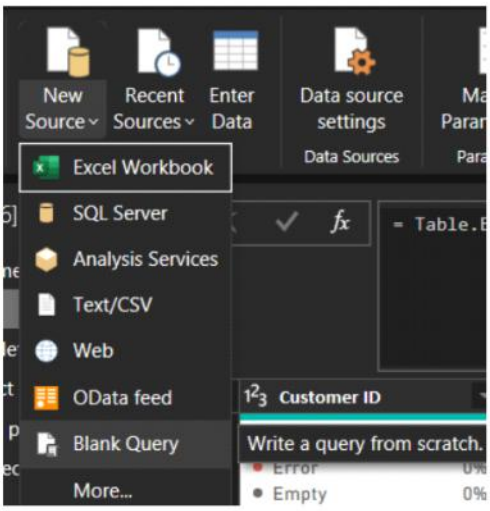
A - 270 [Sum]
B - 100 [Sum]
C - 10 [Sum]
D - null
E - null
F - null

Right Join

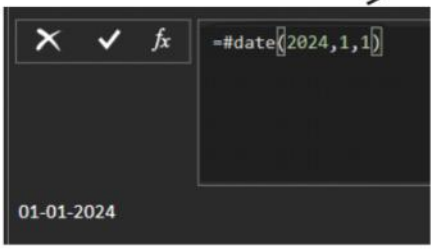


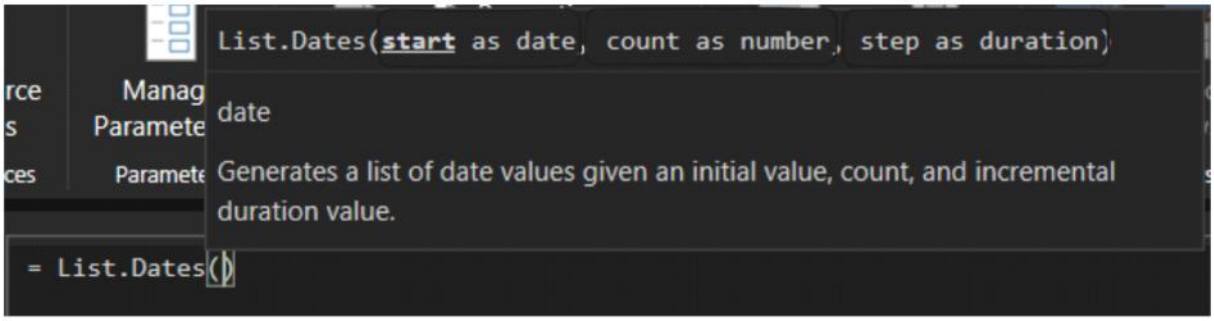


Rolling Calender → Invoke Custom Functions

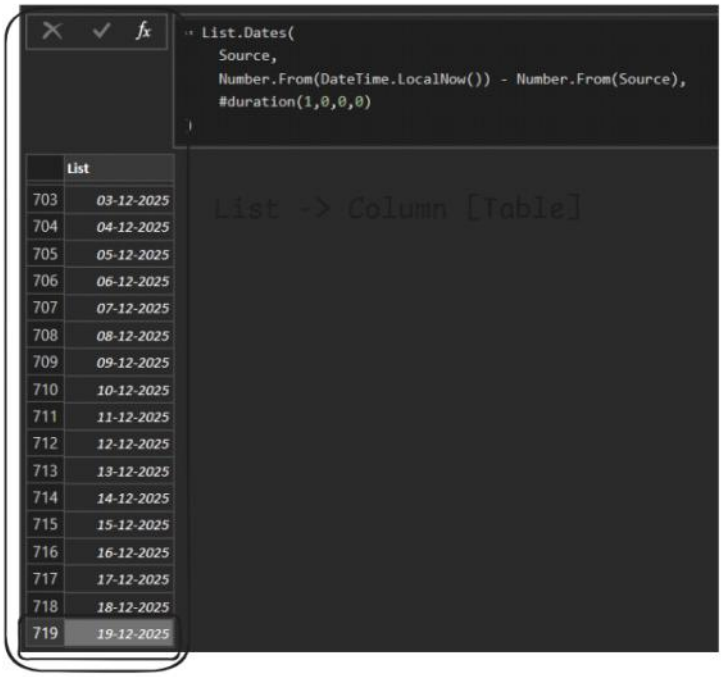


YYYY-MM-DD

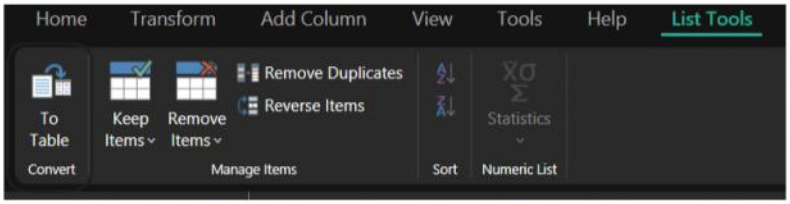


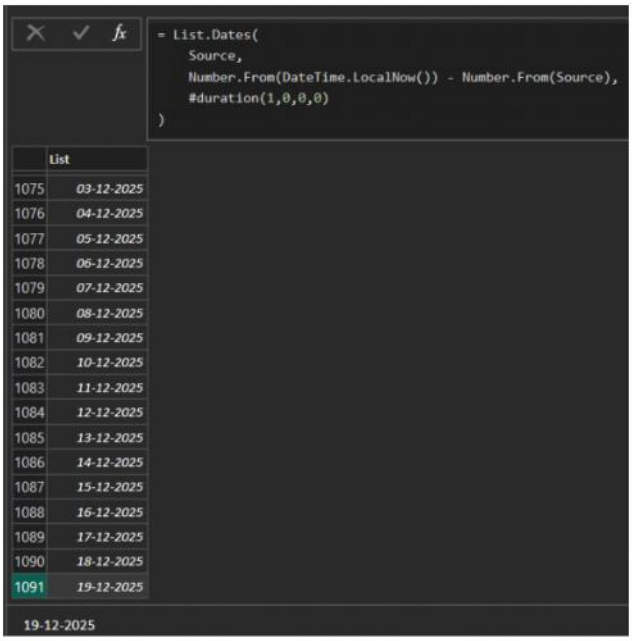


```
= List.Dates(
    Source,
    Number.From(DateTime.LocalNow()) - Number.From(Source),
    #duration(1,0,0,0)
)
```



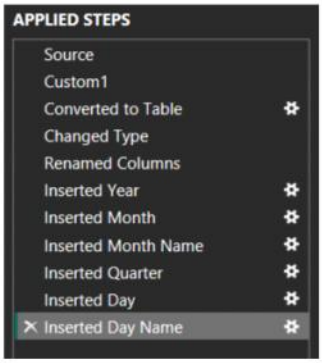
	List
703	03-12-2025
704	04-12-2025
705	05-12-2025
706	06-12-2025
707	07-12-2025
708	08-12-2025
709	09-12-2025
710	10-12-2025
711	11-12-2025
712	12-12-2025
713	13-12-2025
714	14-12-2025
715	15-12-2025
716	16-12-2025
717	17-12-2025
718	18-12-2025
719	19-12-2025



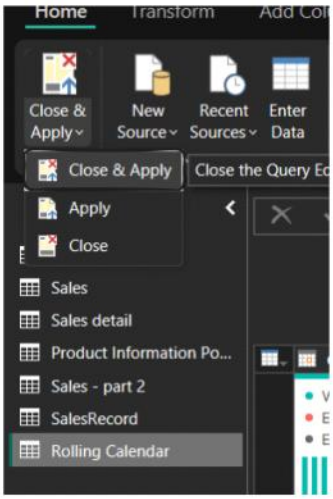


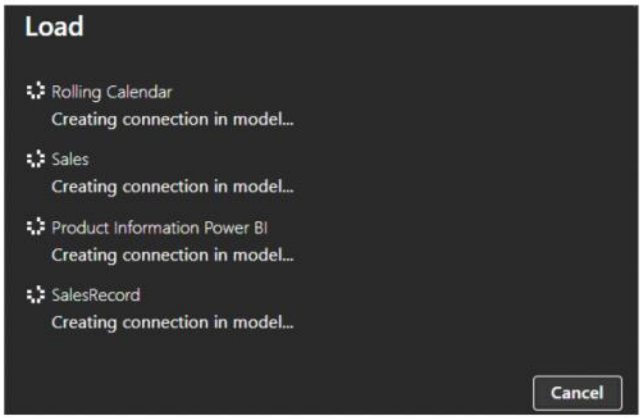
	List
1075	03-12-2025
1076	04-12-2025
1077	05-12-2025
1078	06-12-2025
1079	07-12-2025
1080	08-12-2025
1081	09-12-2025
1082	10-12-2025
1083	11-12-2025
1084	12-12-2025
1085	13-12-2025
1086	14-12-2025
1087	15-12-2025
1088	16-12-2025
1089	17-12-2025
1090	18-12-2025
1091	19-12-2025

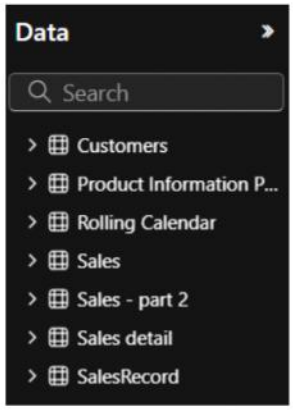
```
25-12-2022
```
Source

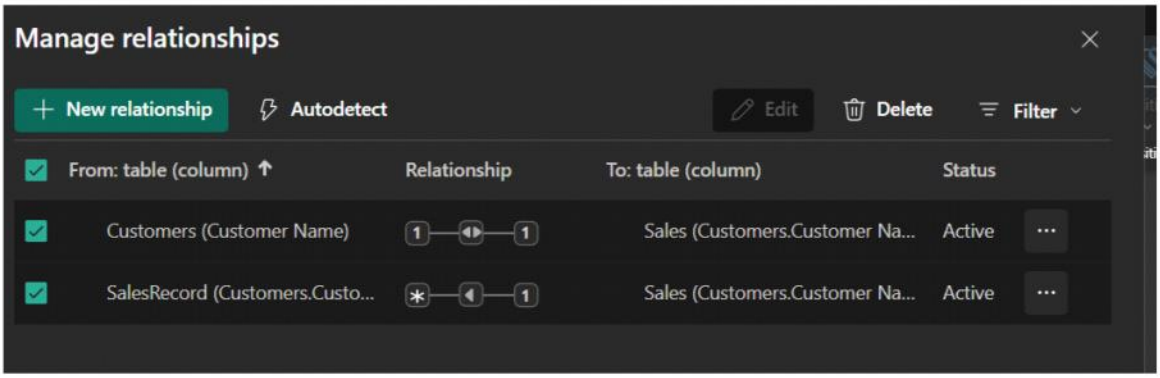


Order Date	Year	Month	Month Name	Quarter	Day	Day Name
Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid 100% Error 0% Empty 0%	Valid Error Empty
1000 distinct, 1000 unique	4 distinct, 0 unique	12 distinct, 0 unique	12 distinct, 0 unique	4 distinct, 0 unique	31 distinct, 0 unique	7 distinct, 0 uniq
25-12-2022	2022	12	December	4	25	Sunday
26-12-2022	2022	12	December	4	26	Monday
27-12-2022	2022	12	December	4	27	Tuesday
28-12-2022	2022	12	December	4	28	Wednesday
29-12-2022	2022	12	December	4	29	Thursday
30-12-2022	2022	12	December	4	30	Friday
31-12-2022	2022	12	December	4	31	Saturday
01-01-2023	2023	1	January	1	1	Sunday
02-01-2023	2023	1	January	1	2	Monday
03-01-2023	2023	1	January	1	3	Tuesday
04-01-2023	2023	1	January	1	4	Wednesday
05-01-2023	2023	1	January	1	5	Thursday
06-01-2023	2023	1	January	1	6	Friday
07-01-2023	2023	1	January	1	7	Saturday
08-01-2023	2023	1	January	1	8	Sunday

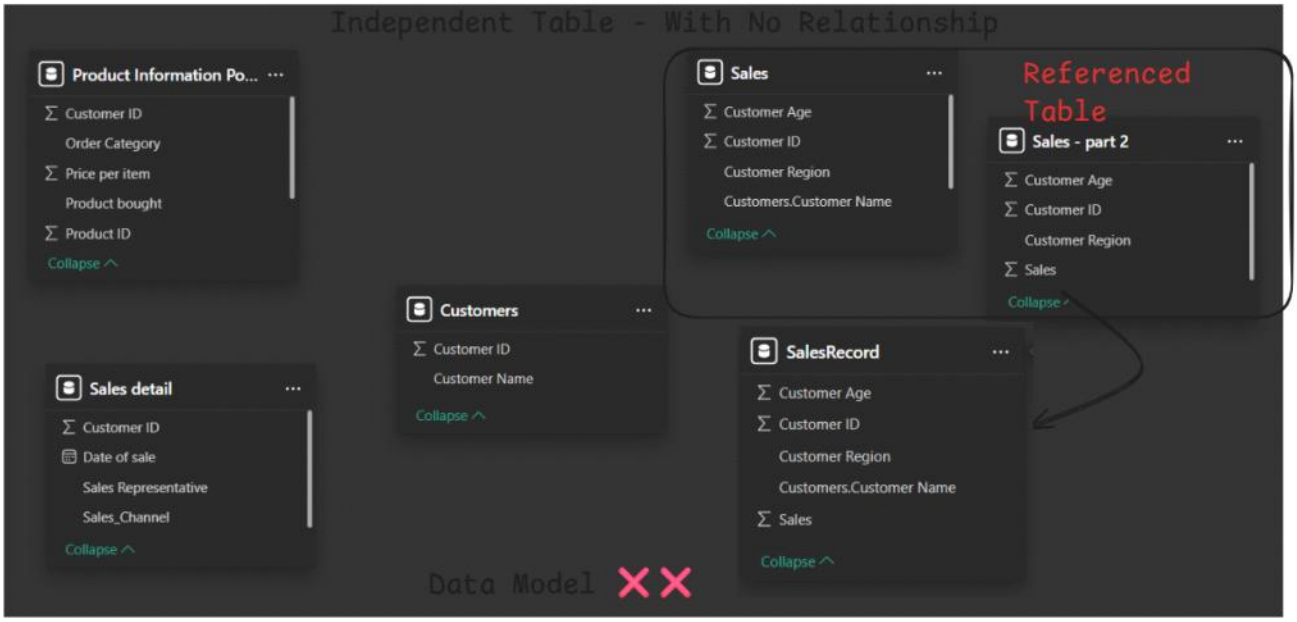


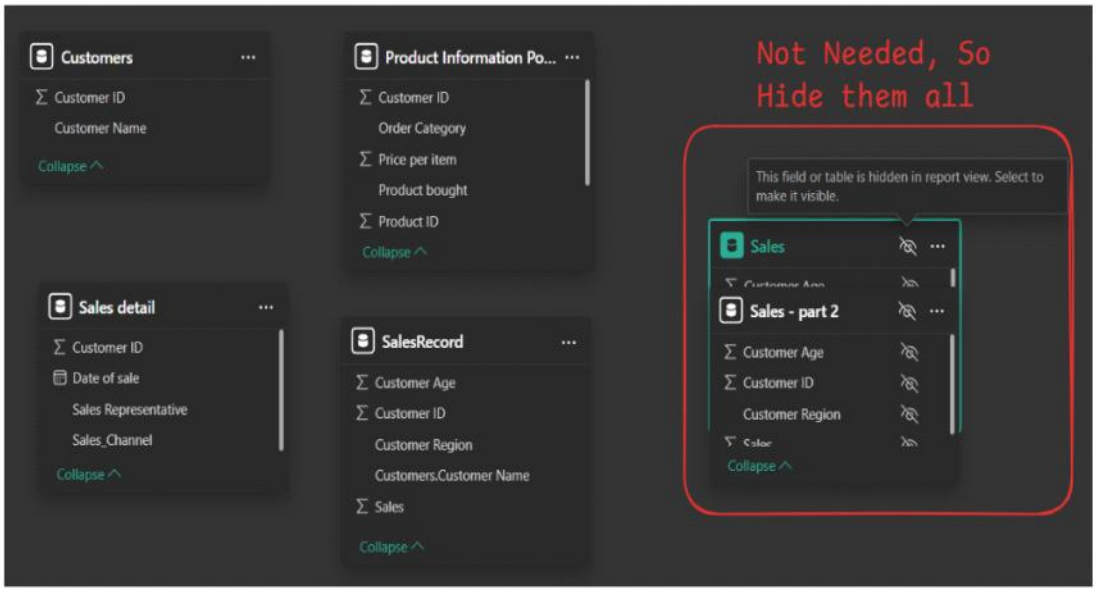




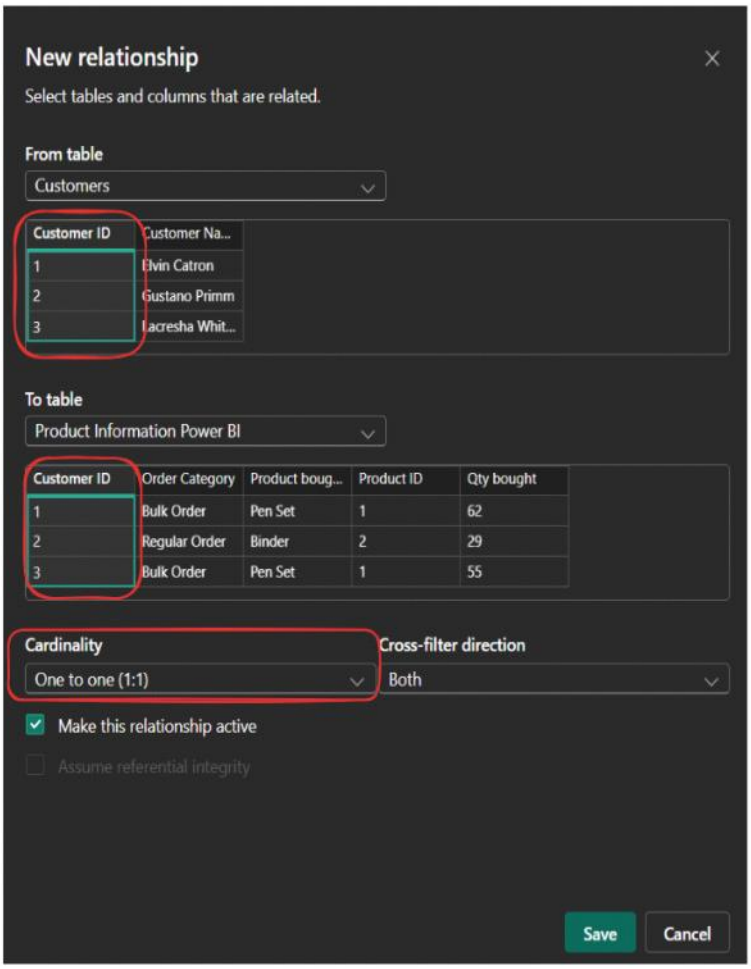


What is a Data Model?





Customer Name	Sum of Qty bought
Alberta Fabela	854
Betty scruggs	854
Debbie Orone	854
Elvin Catron	854
Era Gassner	854
Grisede Mariscal	854
Gustano Primm	854
Jacinda Moffett	854
Juan Luker	854
Karisa Oquwndo	854
Lacresha Whitty	854
Laticia Crimi	854
Loralee Widell	854
Octavio Ricci	854
Ricky Cheshire	854
Season Viers	854
Shan texeria	854
Sylvester Willbourn	854
Taylor Pogue	854
Yee Bordeau	854
Total	**854**



Customer Name	Sum of Qty bought
Alberta Fabela	7
Betty scruggs	35
Debbie Orone	14
Elvin Catron	62
Era Gassner	3
Grisede Mariscal	76
Gustano Primm	29
Jacinda Moffett	42
Juan Luker	96
Karisa Oquwndo	64
Lacresha Whitty	55
Laticia Crimi	2
Loralee Widell	15
Octavio Ricci	81
Ricky Cheshire	57
Season Viers	11
Shan texeria	94
Sylvester Willbourn	28
Taylor Pogue	16
Yee Bordeau	67
Total	**854**