

Combining data in Power Query

DATA TRANSFORMATION IN POWER BI

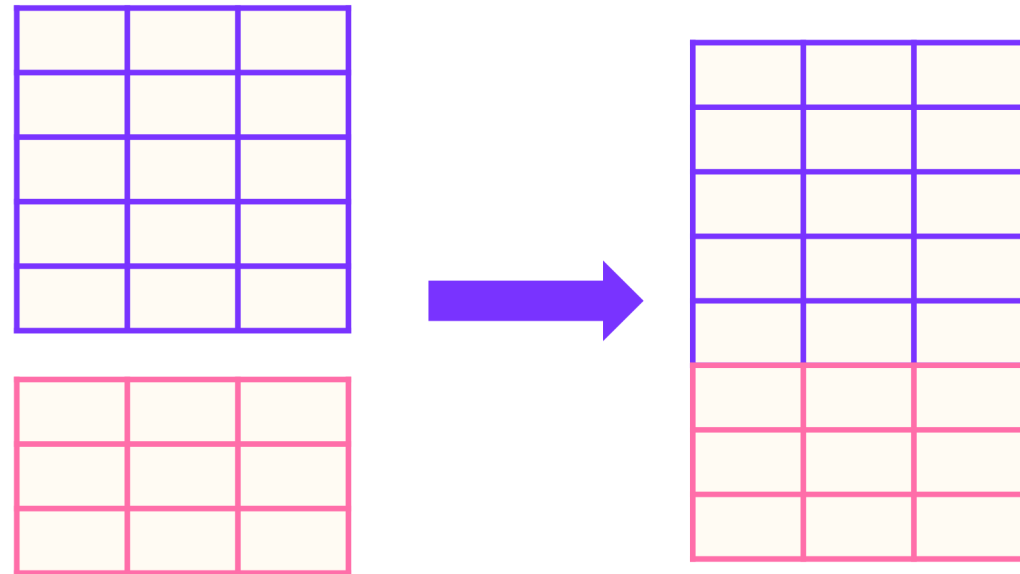


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Why combine data?

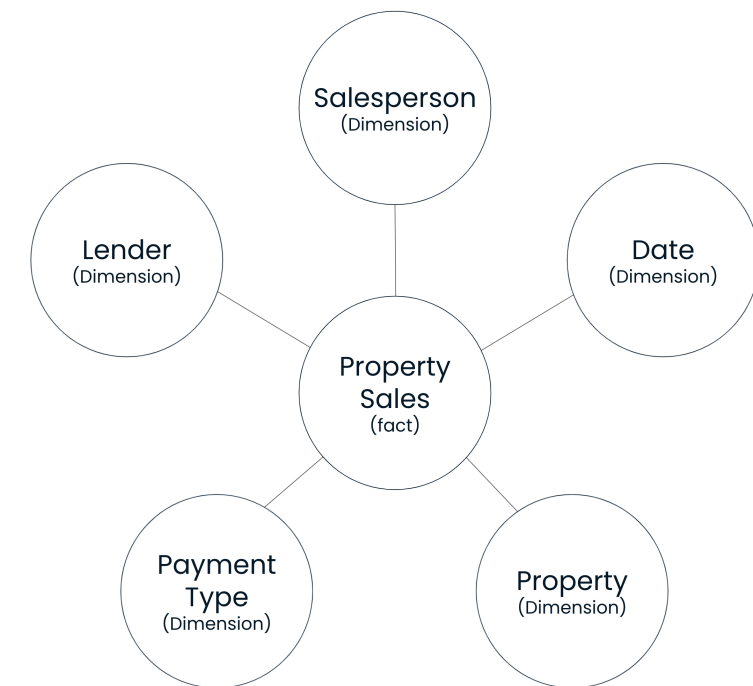
Append Queries

- Many separate files with similar data
- Data is too large to store in one file



Merge Queries

- Tables have relationships between one or more columns
- Tables can be combined to make a "flat" structure



Appending data

- Append query will add rows to your table
 - "Vertically" combining queries
 - Column names must be the same

2018 Q1		
2018 Q2		
2018 Q3		
2018 Q4		
2019 Q1		

...

- Nulls will appear when there are different column names or number of columns

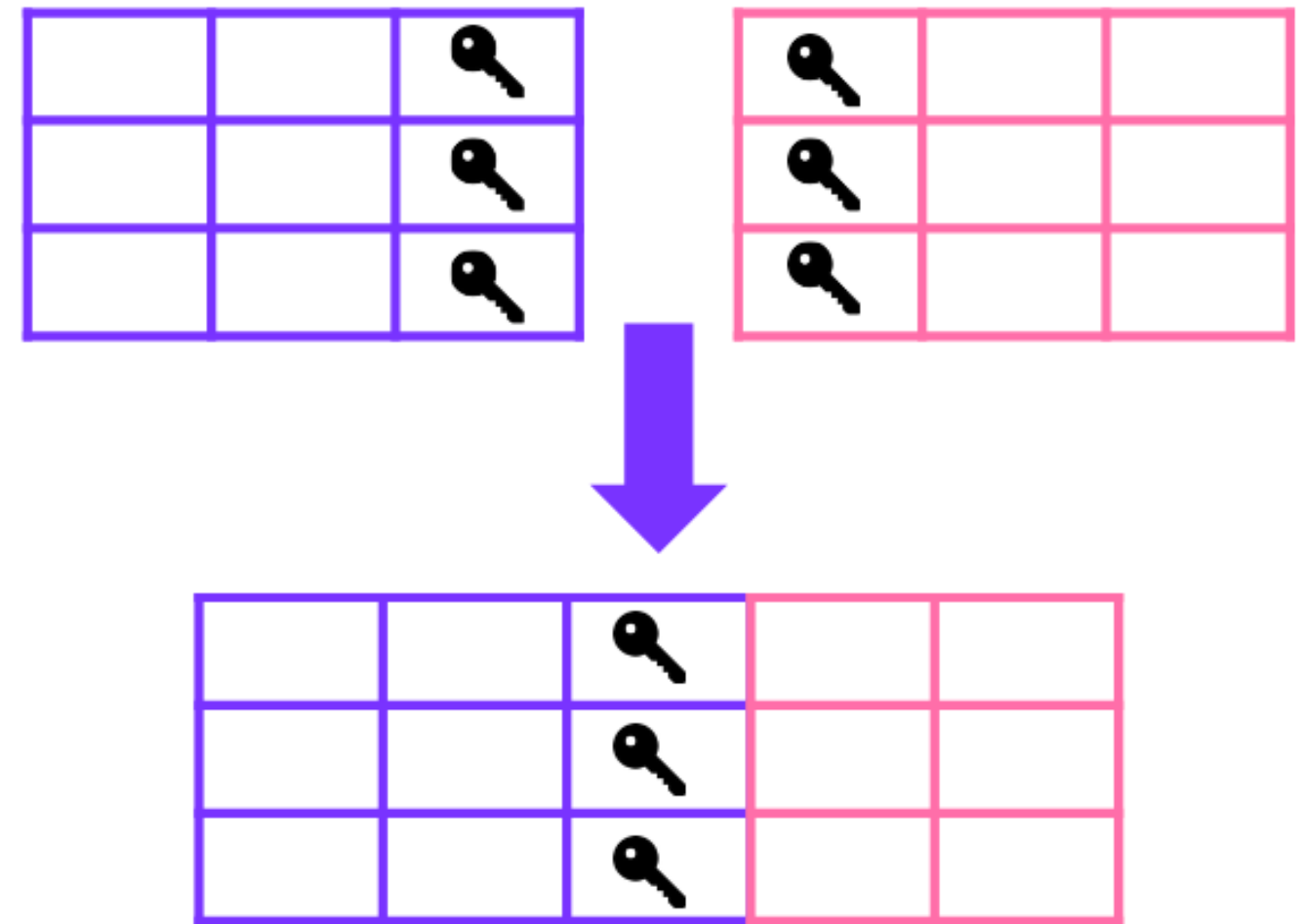
Player A	Player B	Player C
1	1	1
2	2	2
3	3	3

Player A	Player B	Player D
4	4	4
5	5	5

Player A	Player B	Player C	Player D
1	1	1	null
2	2	2	null
3	3	3	null
4	4	null	4
5	5	null	5

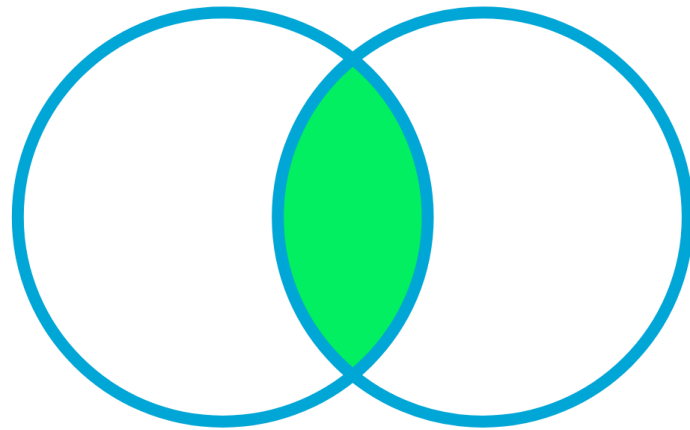
Merging data

- Merging queries will add columns to your table
 - "Horizontally" combining queries
 - Join tables through unique identifiers or keys



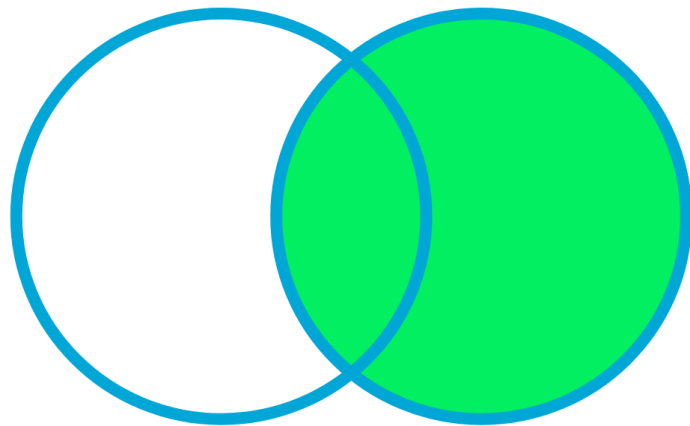
Merging data: types of joins

Inner Join



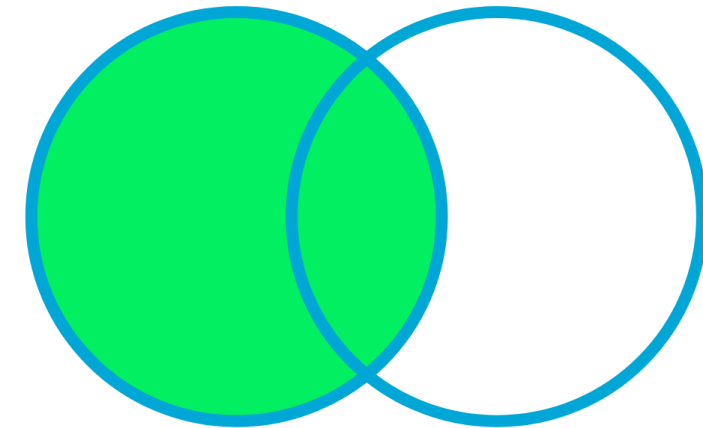
Returns matched rows only

Right Join



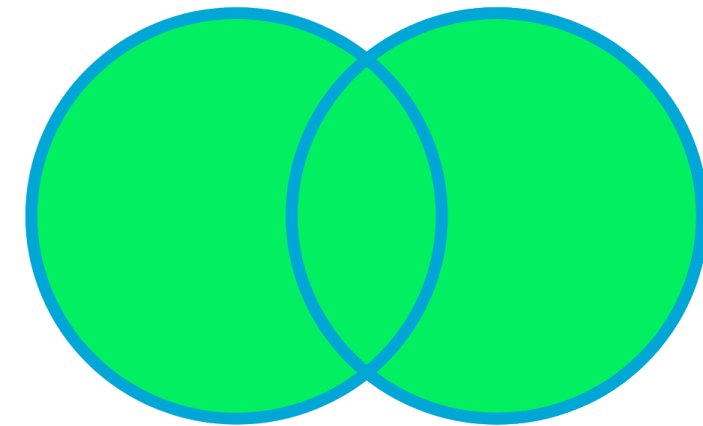
Returns matched rows and right table's rows

Left Join



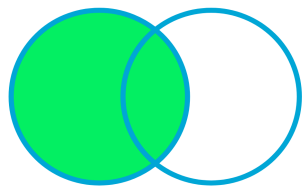
Returns matched rows and left table's rows

Full Join



Returns matched rows and both tables' rows

Merging data: example of a left join



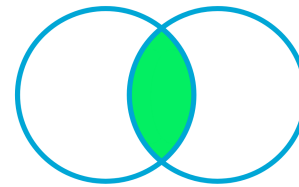
Sales Table		
Customer_id	Value	Product_id
1	\$80	123
2	\$5	456
3	\$500	789

Product Table		
Product_id	Category	Product
123	Shoes	Running Shoes
456	Clothing	Socks



Customer_id	Value	Product_id	Category	Product
1	\$80	123	Shoes	Running Shoes
2	\$5	456	Clothing	Socks
3	\$500	789	<i>null</i>	<i>null</i>

Merging data: example of an inner join



Sales Table		
Customer_id	Value	Product_id
1	\$80	123
2	\$5	456
3	\$500	789

Product Table		
Product_id	Category	Product
123	Shoes	Running Shoes
456	Clothing	Socks

Customer_id	Value	Product_id	Category	Product
1	\$80	123	Shoes	Running Shoes
2	\$5	456	Clothing	Socks

Let's practice!

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Merging and appending queries in Power Query

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Let's practice!

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