

Combining and Filtering Data with T-SQL

Querying Data from Multiple Sources Using Joins



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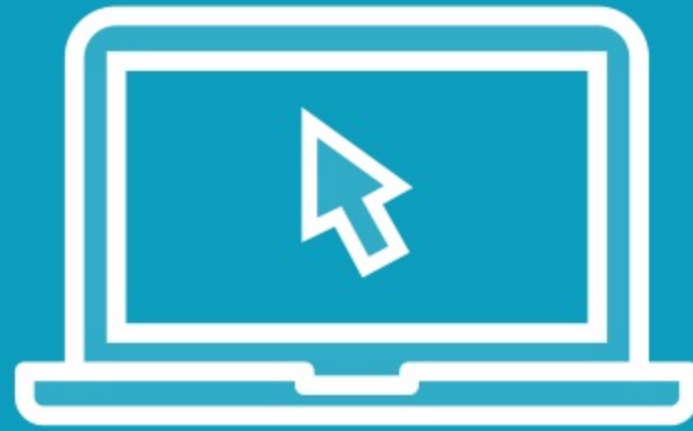
Overview



- **Primary and Foreign Keys**
- **Combining data from multiple tables and databases**
- **Write queries using joins**
- **Quality counts!**
 - Data integrity
 - Query Accuracy



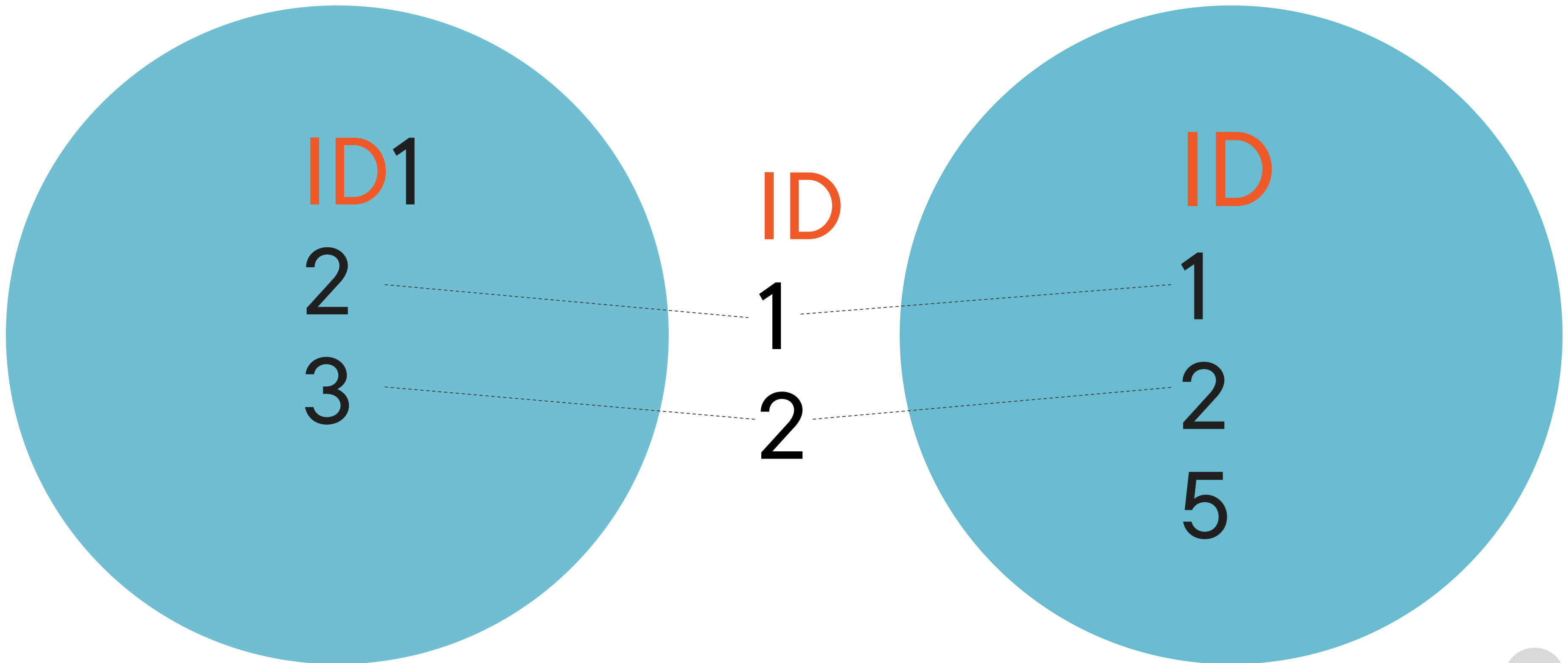
Demo



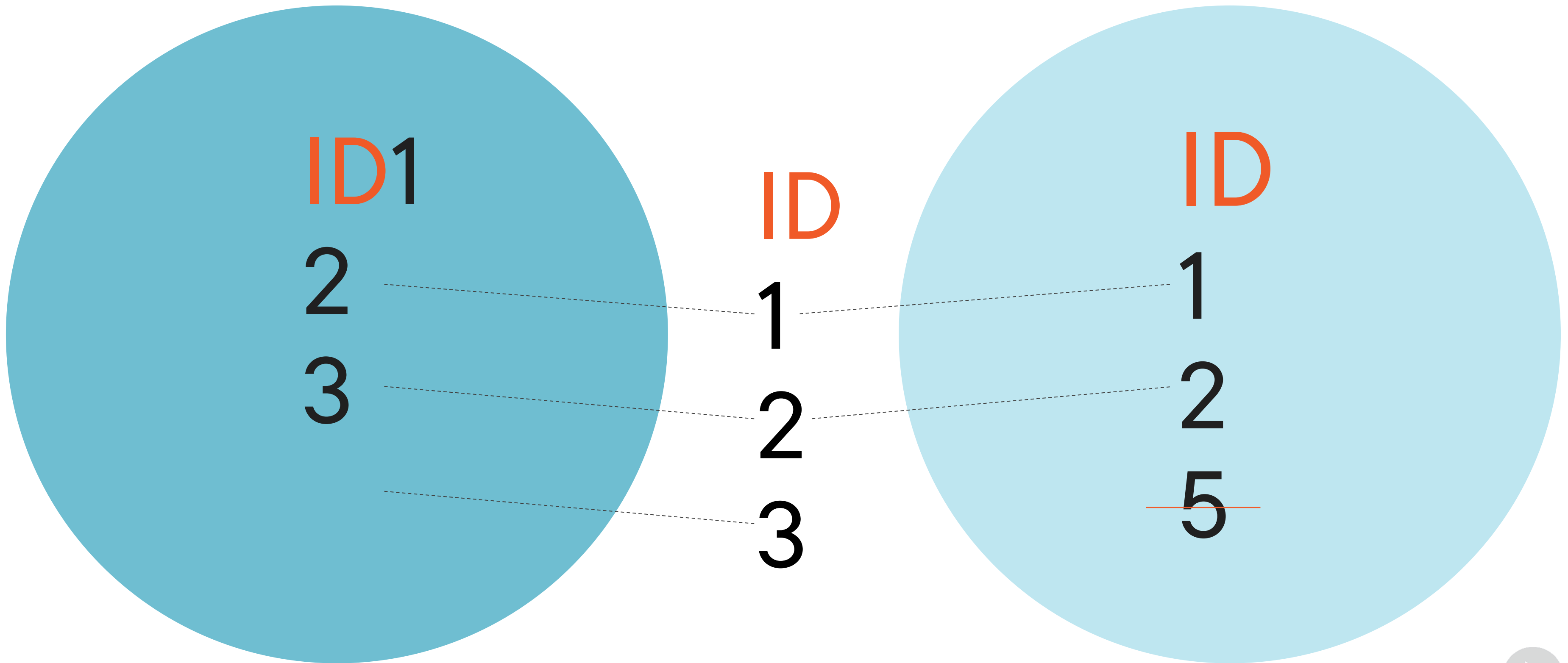
- Create database diagrams
- Creating relationships between tables
 - Primary Keys
 - Constraints
- Combining data from multiple data sources
- Techniques for checking data integrity and query validation



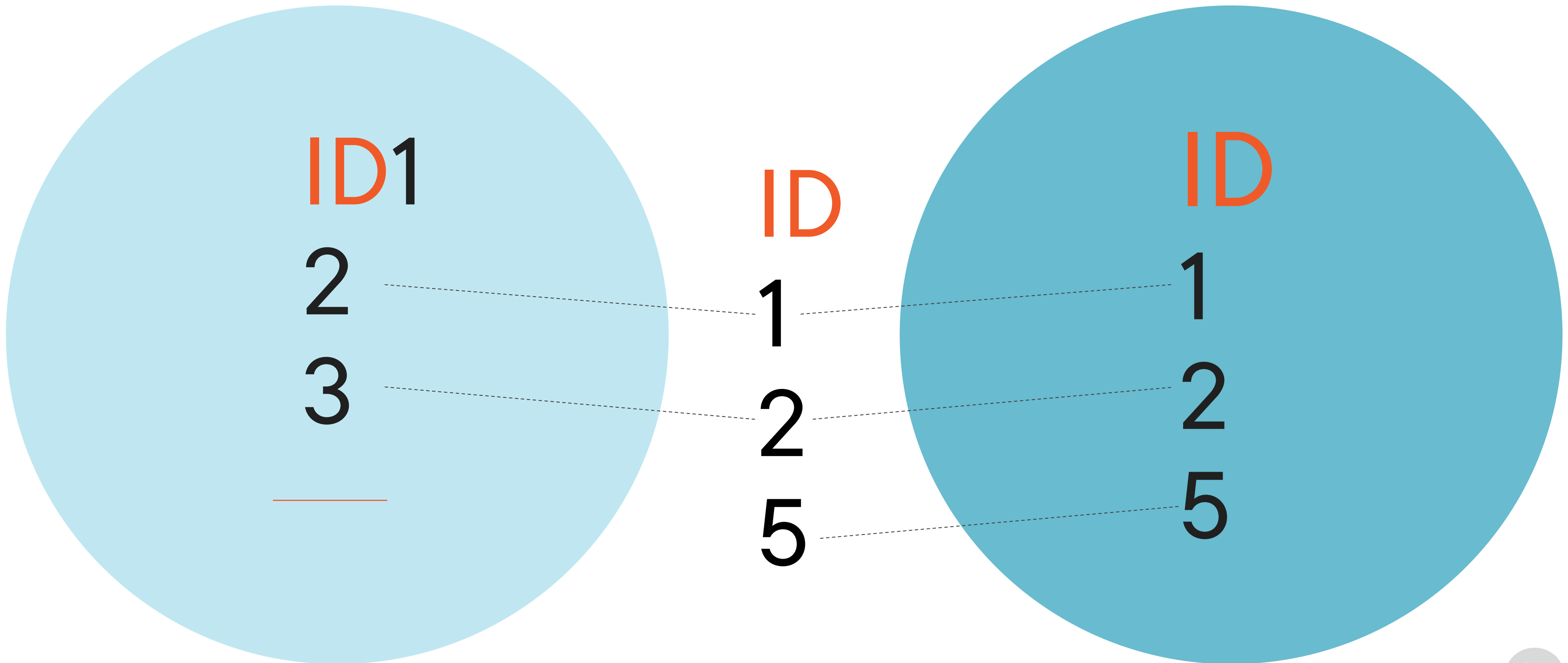
INNER JOINS



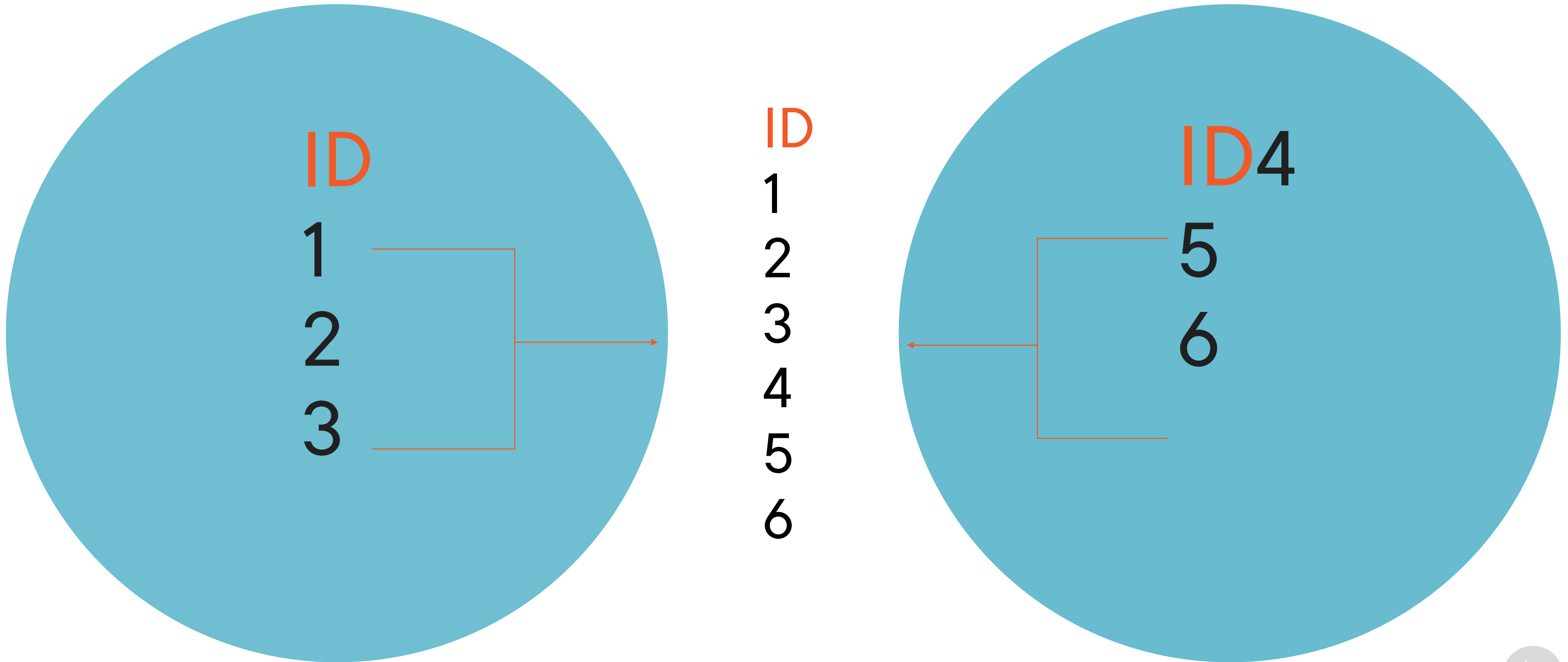
LEFT JOINS



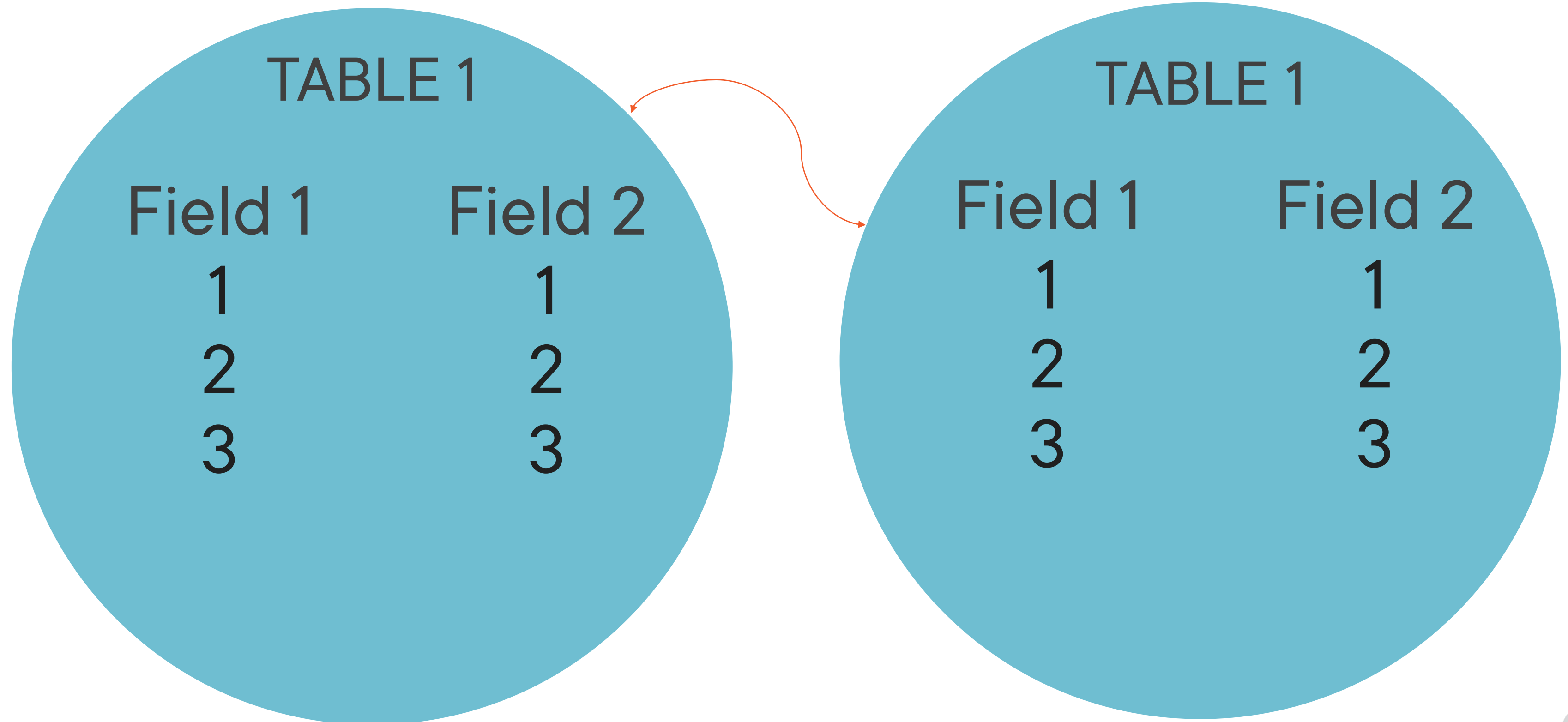
RIGHT JOINS



FULL OUTER JOINS



SELF JOINS



LEFT and RIGHT JOINS



FULL JOINS



Inner Joins



SELF JOINS



Joins and Table Relationships



- **Table relationships**
 - Primary and Foreign Keys
- **Joins**
 - Inner
 - Left and Right
 - Full Outer
 - Self
 - Multiple databases



Exercise Files

- M4 – Analyzing with FULL OUTER Join
- M4 – Formatted FULL OUTER Join
- M4 – Formatted Inner Joins
- M4 – FULL OUTER Join
- M4 – Inner Joins Formatted Report
- M4 – Inner Joins
- M4 – JOIN
- M4 – LEFT JOIN
- M4 – RIGHT JOIN
- M4 – RIGHT JOINS
- M4 – Self Joins
- M4 – Self Joins example 2
- M4 – Self Joins 3



Up Next:
Filtering and Controlling Flow

