



Getting started with SQL Queries – the SELECT statement

Who would benefit?

To be an effective data analyst, you will benefit in knowing how to extract data from relational databases using the language called SQL (pronounced S-Q-L). This 1 day introductory workshop explains ANSI SQL syntax which is shared by many types of databases, such as PostgreSQL, MySQL, SQL Server, and Oracle.

This practical workshop is typically taught using an example Microsoft SQL Server database and writing the code in SSMS (the GUI provided by Microsoft). If you have a different database/GUI please let us know your requirements.

This course is instructor led. Each section begins with an explanation and demonstration and then has several practical exercises for you to apply your knowledge and test your understanding

Content

Getting Started

- Relational Database Concepts
- The role of SQL
- Overview of the databases used in the workshop

Writing Basic SQL Statements

- The syntax of the SELECT statement
- Using the DISTINCT keyword
- ORDER BY (to sort data)
- Examples of WHERE criteria including wildcards, comparison operators, BETWEEN, LIKE, IN
- Top N

SQL Joins

- The principle of including data from multiple tables in queries
- Joining multiple tables in the FROM clause
- Different join types: INNER, OUTER, SELF and CROSS joins

Single Row Functions

- Performing mathematical calculations
- Useful date functions
 - GetDate()
 - DateADD()
 - DateDIFF()
- Conversion functions and their uses
- Column aliases

Grouping Data

- How to write aggregate queries
- COUNT Vs Count(*)
- GROUP BY
- HAVING

Duration

One day