

SQL Basic to Advanced

Course Summary

Description

Come prepared to learn the Structured Query Language (SQL) across multiple database platforms in this fast paced and hands-on course. The course begins with a discussion of relational concepts and terminology and quickly moves into a very practical discussion of data retrieval and manipulation using SQL. Each topic is reinforced with hands-on workshops. Examples and workshops are provided for multiple platforms such as Db2 for z/OS, Db2 for Linux, Unix & Windows, Oracle Database, Microsoft SQL Server, and PostgreSQL. Differences between the RDBMSs are highlighted throughout the material and especially the SQL workshops. Students will leave with the ability to code queries involving simple to intermediate complexity.

Get ready to go to the next level with the Structured Query Language (SQL) and become a power user. Whether you are being asked to solve complicated problems with SQL or you need to read and understand complex SQL that is already written, this course is for you. Come prepared to master the Structured Query Language (SQL) across multiple database platforms in this fast paced and hands-on course. We begin with a review of joins and move quickly to more complex operations involving set processing, advanced grouping, table expressions, recursion and more. Each topic is reinforced with hands-on workshops. Examples and workshops are provided for multiple platforms, such as Db2 for z/OS, Db2 for Linux, Unix & Windows, Oracle, SQL Server or PostgreSQL, with discussion of the relevant differences.

Topics

- SQL and Relational Databases Overview
- SELECT Statements
- SELECT WHERE Clause Operators
- SELECT ORDER BY Clause
- SQL Case Logic
- SQL Built-in/Supplied Functions
- SQL Aggregate Functions/Group By, Having Clauses
- Insert, Update, Delete, Merge, Truncate Statements
- Inner/Outer Joins
- Basic Subqueries
- Review Inner/Outer Joins
- Subquery Table Expressions
- Set Operations
- Advanced Grouping with the CUBE, ROLLUP and GROUPING SETS Extensions
- Solving Complex Problems with SQL
- PIVOT and UNPIVOT Operations
- Using Temporary Tables and Views

Audience

Programmers, Analysts, Database Administrators, End Users and IT Managers who are exposed to, or are required to perform the activities associated with data stored in a relational database.

Prerequisites

There are no prerequisites for this course.

Duration

Five days