
Introduction to DB2 and SQL

Introduction to DB2 and SQL is designed for the IT professional who wants to learn more about DB2 and its companion language SQL. It is equally appropriate for those who are entirely new to relational database technology, as well as for those who already have some experience in relational database management systems.

This 2-day course introduces relational database concepts and the facilities of the DB2 family of relational database management systems. Basic to intermediate SQL syntax is presented in an easy-to-understand format. Extensive hands-on workshops allow the attendee to master the concepts presented in the lecture sessions and return to work much better prepared to avail him- or herself of the power of the DB2 engine.

Platforms

The entire DB2 family of products and any relational database management system that adheres to ANSI-standard SQL.

Audience

Application programmers, database administrators, sophisticated end users, and anyone who needs to know more about basic to intermediate SQL.

Prerequisites

There are no DB2- or SQL-specific prerequisites for this course. However, any prior experience with DB2 or other relational database management systems should prove valuable. Proficiency with Windows, Notepad (or similar text editors), the mouse, and the PC in general is assumed. For a mainframe audience, familiarity with TSO, ISPF, and PDS file formats is also assumed.

Upon completion of this course, many students benefit from attending *Advanced SQL for DB2 UDB for Linux, UNIX, Windows* as a follow-on course.

Outline/Schedule

Day 1

Chapter 1—Introduction to Relational Databases

Workshop 1—Familiarization

Chapter 2—Simple SELECT Statements

Workshop 2—Data Retrieval

Chapter 3—Simple Modification Statements

Workshop 3—Data Modification

Chapter 4—Data Types and Scalar Functions

Day 2

Workshop 4—Customizing Result Sets

Chapter 5—Joining Tables

Workshop 5—Inner Joins

Chapter 6—Aggregate Processing

Workshop 6—Column Functions and Grouping

Chapter 7—Subqueries and Unions

Workshop 7—Subqueries and Unions

Chapter 8—Review and Summation

Objectives

Upon completing this course, you should be able to:

- ◆ Be fully conversant in relational database concepts and terminology, particularly that of the DB2 family of database management systems, “universal” and otherwise
- ◆ Identify the various types and components of Structured Query Language (SQL)
- ◆ Code simple to complex SELECT, INSERT, UPDATE, and DELETE statements
- ◆ Distinguish between DB2’s various built-in data types and use scalar functions to transform data types
- ◆ Code simple inner join statements and understand the concepts of an outer join
- ◆ Perform aggregate processing with column functions and the GROUP BY and HAVING clauses
- ◆ Perform multitable operations involving subqueries and unions.