

Course Overview

In this 1-day course, you will begin by learning advanced query concepts for subqueries to manipulate data for business reports. You will learn how to compare one or more values in one query to those generated by another query. You will learn how to search to see if certain values exist, and how to search using grouped queries. You will learn how to create queries that rely on other queries to generate values. You will also learn the SQL language and concepts used to add, change and delete data from a SQL Server database. You will learn the concepts and how to add and edit columns plus how to create and delete tables. You will learn how to capture SELECT queries into views. You will learn the concepts of indexing. Finally you will be introduced to SQL transactions through using a transaction to insert values into a table.

Courses in the SQL Queries Series

SQL Queries Level 1
- 2 days -

SQL Queries Level 2
- 1 day -

Course Preparation

Prerequisite Course: *SQL Queries Level 1* or equivalent experience.

Course Topics

Advanced Querying Using Subqueries

- Search a single table for an unknown value
- Search in a separate table for multiple values
- Compare a known value with a list of unknown values
- Create a query dependent on the existence of certain data
- Generate output using correlated queries
- Filter grouped data within subqueries
- Perform multiple-level subqueries

Manipulating Table Data

- Inserting Values into a Table
- Updating Columns with Specific Values
- Using a Filter to Narrow the Update to Certain Records
- Deleting Records with a Filter
- Deleting All Records in a Table
- The difference between DELETE and TRUNCATE
- Tracking the results with the OUTPUT Clause

Manipulating Table Structure

- Creating Tables in Microsoft SQL Server
- Understanding SQL Server Data Types
- Table Design Guidelines
- Creating Simple Tables
- Column Constraint Concepts
- Using the Primary Key Constraint
- Adding and Dropping Columns in Tables
- Common Data Types in SQL or Oracle Databases
- Changing Column Definition
- Removing Column Constraints
- Creating Back Up Tables
- Deleting Table Structure

Working with Views

- View Concepts
- Creating Views from SELECT Queries
- Manipulating Data in Views
- Modifying Views
- Dropping Views

Indexing Data

- Introduction to Indexing Data
- Adding and Removing Indices

Introduction to Transactions

- Transaction Concepts and Structure
- How to Begin and End Transactions
- Using ROLLBACK and SAVE statements
- Inserting Values Using a Transaction

Rev 1/14/09