



Writing Queries Using Microsoft SQL Server 2005 T-SQL

Prerequisites: To get the most out of this course, an understanding of relational databases is helpful. No particular programming experience is required.

A Tour of SQL Server 2005

- SQL Server 2005 Editions, Components, and Tools
- Using SQL Server Management Studio (SSMS)
- Working with Tables and Queries
- New Transact-SQL Features
- Business Intelligence Services

Designing and Creating a Database

- Relational Database Design Principles
- Implementing the Design

Data Selection Queries

- Understanding Transact-SQL
- The SELECT Statement
- The WHERE Clause
- Using ORDER BY to Sort Data
- The GROUP BY Clause
- Joining Tables

Modifying Data

- Modifying Data
- Inserting Data
- Updating Data
- Deleting Data
- Understanding Transaction Isolation

Working with SQL Server Management Studio

- Getting Started with SSMS
- Exploring the Object Explorer
- Working with the Query Editor
- Using SQL Server Books Online

Transact-SQL Programming

- Overview of Transact-SQL
- Using Built-In Functions
- Controlling Flow
- Ranking Results

Transactions and Error Handling

- Transaction Concepts
- Applications and Transactions
- Creating Explicit Transactions
- Using TRY/CATCH Error Handling

Creating Views

- What Is a View?
- Creating Views
- Updating Data Using a View
- Using Computed Columns
- Indexed Views
- Partitioned Views

Creating Stored Procedures and Triggers

- Creating Stored Procedures
- Creating Triggers

Creating User-Defined Functions

- User-Defined Function Overview
- Scalar Functions
- Inline Table-Valued Functions
- Multi-Statement Table-Valued Functions
- Using Functions, Views, and Stored Procedures

Using .NET Code in SQL Server 2005

- Writing SQLCLR Code
- SQLCLR Code Modules
- Managing Code Modules
- SQLCLR Security
- T-SQL vs. .NET Code

Advanced Query Techniques

- Full-Text Search
- Generating XML with FOR XML
- Using APPLY
- Creating Recursive Queries
- Creating Pivot Queries
- Executing Dynamic SQL