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Learning Style: Virtual Classroom

Technology: Microsoft

Difficulty: Beginner

Course Duration:

SQL Querying Fundamentals - Part 2



About This Course:

Think you know SQL? Time to level up. SQL appears in over 45% of all data job postings, making it the most in-demand skill for data professionals. In this SQL training course, you'll build on your foundational skills to write advanced queries, structure and index tables, and control how data is stored and manipulated.

Through real-world exercises and expert instruction, you'll learn how to use

subqueries, manage views, and execute transactions—giving you the tools to confidently handle more complex data scenarios.

Course Objectives:

After completing this course, students will be able to perform advanced SQL operations on relational databases to retrieve, manipulate, and secure data more effectively.

You will gain skills in:

- Writing subqueries and multi-level subqueries
- Inserting, updating, and deleting data in tables
- Creating and modifying table structures and constraints
- Creating views and performing data operations through views
- Creating and managing indices for optimized performance
- Using transactions to manage changes with commit and rollback

Audience:

- Students should have basic computer skills, SQL skills, and be familiar with concepts related to database structure and terminology.

Prerequisites:

- SQL Querying Fundamentals - Part 1

Course Outline:

1. Using Subqueries to Perform Advanced Querying

- Search Based on Unknown Values
- Compare a Value with Unknown Values
- Search Based on the Existence of Records
- Generate Output Using Correlated Subqueries
- Filter Grouped Data Within Subqueries

- Perform Multiple-Level Subqueries

2. Manipulating Table Data
    - Insert Data
    - Modify and Delete Data

3. Manipulating the Table Structure
    - Create a Simple Table
    - Create a Table with Constraints
    - Add or Drop Table Columns
    - Add or Drop Constraints
    - Modify the Column Definition
    - Back Up Tables
    - Delete Tables

4. Working with Views
    - Create a View
    - Manipulate Data in Views
    - Create Aliases
    - Modify and Drop Views

5. Indexing Data
    - Create Indices
    - Drop Indices

6. Managing Transactions
    - Create Transactions
    - Commit Transactions