

SQL Data Analysis with TOAD

Topics Covered in This Course

Working with Toad

- Overview of the Toad Environment
- Organizing File with Toad
- Writing Scripts with Toad
- Debugging Scripts with Toad
- Exploring Toad's Functional Capabilities
- Configuring Toad to Work for You

Relational Database Essentials

- Relational Database Concepts Tables, Fields and Rows
- Understanding Data Normalization
- About Entity Integrity: Primary Keys
- About Referential Integrity: Foreign Keys
- About Domain Integrity: Checks and Defaults
- Overview of Oracle Data Storage Structures and Performance Implications

Mastering the Data Retrieval: The Basics

- The Basic Structure
- About Statement Processing
- Working with Aliases and Headers
- Writing Where Statements
- Performing Pattern Matching
- Querying for Ranges
- Writing Predicates for Specific Data Types
- Sorting Data
- Retrieving Unique Values
- Making use of Union

Mastering Data Retrieval: Working with Multiple Tables

- The Anatomy of the Statement
- Working with Point and Range Queries
- Writing Multi-Table Statements: Exploring Joins
- Exploring Join Types: Inner Outer and Cross
- Optimizing Joins
- Using Regular Sub-Queries
- Using Correlated Sub-Queries
- Comparing Performance Profiles

Mastering Aggregate Calculations

- The Anatomy of Aggregate Value Statements
- Exploring Group By
- Exploring Oracle Aggregate Functions
- Dealing with Multiple Tables

Modifying Data

- Working with New Data
- Working with Data Modification
- Working with Data Suppression
- Working with Multiple Records
- Performing Bulk Operations

SQL Common Tasks

- Working with Automatic Increments
- Working with Strings

- Working with Dates and Time
- Working with NULL Values
- Working with Numeric Data Types

Advanced Tasks

- Identifying Duplicate Values
- Generating Rank
- Generating Median
- Generating Running Totals
- Generating Percent To Total
- Generating Cumulative Percent To Total
- Creating Stored Procedures
- The Performance Advantages of Stored Procedures

Creating Stored Procedures

- Working with Input Parameters
- PLSQL Programming Essentials
- Storing Stored Procedures
- Putting it All Together