



Course 264: Advanced Oracle SQL for Developers (4 days)

Course Description...

Complex designs and complicated questions require advanced SQL skills. This requirement is becoming more and more the norm for many organizations, Advanced Oracle SQL extends the basic concepts of the SELECT statement by adding different types of JOINS, returning data in hierarchical order, aggregating data in multiple levels, and using subqueries in clauses other than the traditional WHERE clause.

Oracle has also developed a new class of functions that support the analytical classification of data, allowing the grouping of data in new ways for ranking, time series, and other views of the information. This course provides the student with extensive lab experience to develop these advanced skills.

Learning Objectives...

- JOIN data in various ways
- GROUP data in levels with ROLLUP and CUBE commands
- Nest subqueries in FROM clauses
- Investigate the power of SQL using the Analytical Functions

Who should attend...

Any one involved in complex data retrievals and analysis. Typical job functions include statistical and marketing analysts, report writers, and supporters of application developers.

Prerequisites...

Basic SQL skills are required. Course 261 plus some experience is sufficient.

See next page for a detailed course outline...



Course Outline

Introduction and Overview

Course Objectives

Unit 1: SQL Basics

- Statement processing
 - Set transformations
- Complex SQL vs. simpler SQL
- SELECT statement syntax
- Issues with NULL
- Single row functions
- Testing considerations
- DML statements
 - INSERT, DELETE, UPDATE
 - MERGE
 - External tables

Unit 2: JOINS

- CROSS
- INNER
- NATURAL
- OUTER
- FULL
- Self
- Set operators

Unit 3: GROUPing

- Defining a group
- Restricting a group
- Aggregate functions
- ROLLUP
- CUBE
- Multiple levels

Unit 4: Nested Statements

- Simple subqueries
- Correlated subqueries
- FROM clause subqueries
- Using a subquery in an expression



Unit 5: Analytical Functions

- Overview
- Syntax
- OVER clause
- PARTITION BY clause
- Ranking
- Aggregate
- Special
 - Ratio_to_Report
 - Percentile_cont()

Unit 6: Oracle Set Definitions

- Views
- In-Line views
- Global temporary tables

Unit 7: Course Summary

Summary

Please contact your ROI representative to discuss course tailoring!!!