Oracle Database 12c R2: SQL Workshop II

This Oracle Database: SQL Workshop II helps you enhance your skills as an Application developer by learning how to manage the database objects, data dictionary views and multicolumn subqueries. Expert Oracle instructors will teach you how to write more efficient queries using the functions that support timezone and regular expressions.

Learn To:

- Grant and revoke privileges and roles.
- Manage schema objects and data dictionary views.
- Write efficient and complex subqueries.
- Use the in-built functions supporting the usage of regular expressions and time zone.

Benefits to You

Ensure fast, reliable, secure and easy to manage performance. Optimize database workloads, lower IT costs and deliver a higher quality of service by enabling consolidation onto database clouds.

Advanced Features of SQL

By enrolling in this course, you'll also gain exposure to using the advanced features of SQL to query and manipulate data within the database. Learn to control privileges at the object and system level, while deep diving into advanced querying and reporting techniques.

Reinforce Your Knowledge with Hands-On Practices

During this SQL workshop, you'll use Oracle SQL Developer as the main environment tool for writing SQL. SQL*Plus is introduced as an optional tool. Demonstrations and hands-on practice reinforce new concepts that are introduced.

Prerequisites

Required Prerequisite

- Familiarity with SQL Developer, SQL*Plus
- Basic Knowledge of SQL

Audience

- Developer
- Implementer
- Systems Administrator

Objectives

- Add new users with different levels of access privileges
- Manage schema objects
- Run data definition language (DDL) statements to create and manage schema objects
- Manage objects with data dictionary views
- Control database access to specific objects
- Manipulate large data sets in the Oracle database by using subqueries
- Manage data in different time zones
- Write multiple-column subqueries
- Use scalar and correlated subqueries

Topics

- Introduction
    - Course Objectives, Course Agenda and Appendixes Used in this Course
    - Provide an insight of the development environments
    - Tables used in the Course
    - Review of the SQL Concepts
- Introduction to Data Dictionary Views
    - Introduction to Data Dictionary
    - Describe the Data Dictionary Structure
    - Using the Data Dictionary Views
    - Querying the Data Dictionary Views
- Creating Sequences, Synonyms, Indexes
    - Overview of sequences
    - Overview of synonyms
    - Overview of indexes
- Creating Views
    - Overview of views
- Managing Schema Objects
    - Managing constraints
    - Creating and using temporary tables
    - Creating and using external tables
- Retrieving Data by Using Subqueries
    - Retrieving Data by Using a Subquery as Source
    - Working with Multiple-Column subqueries
    - Using Scalar subqueries in SQL
    - Correlated Subqueries
    - Working with the WITH clause
- Manipulating Data by Using Subqueries
    - Using Subqueries to Manipulate Data
    - Inserting by Using a Subquery as a Target
    - Using the WITH CHECK OPTION Keyword on DML Statements

- - Using Correlated Subqueries to Update and Delete rows
- Controlling User Access
  - System privileges
  - Creating a role
  - Object privileges
  - Revoking object privileges
- Manipulating Data
  - Overview of the Explicit Default Feature
  - Using multitable INSERTs
  - Using the MERGE statement
  - Performing flashback operations
  - Tracking Changes in Data
- Managing Data in Different Time Zones
  - Working with CURRENT_DATE, CURRENT_TIMESTAMP,and LOCALTIMESTAMP
  - Working with INTERVAL data types
  - Using Datetime functions in queries