

## Oracle Database: SQL Workshop II Ed 2

**Duration:** 2 Days

### What you will learn

The Oracle Database: SQL Workshop II Ed 2 course will help students enhance their skills as Application developers by learning to manage the database objects, data dictionary views and multicolumn subqueries. Students also learn to write more efficient queries using the functions supporting the 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

This course is designed for application developers with basic SQL language skills. Students learn how to use the advanced features of SQL in order to query and manipulate data within the database. Students will also learn how to control privileges at the object and system level. Advanced querying and reporting techniques are explained. Students will learn to use the regular expression support in SQL.

Students benefit by using 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 the concepts.

### Audience

Application Developers  
Database Administrators  
Forms Developer  
Functional Implementer  
PL/SQL Developer  
System Analysts

### Related Training

*Required Prerequisites*

Basic Knowledge of SQL

Familiarity with SQL Developer, SQL\*Plus

## Course Objectives

Control database access to specific objects

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

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

Use the regular expression support in SQL

## Course 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 Using Advanced Queries**

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