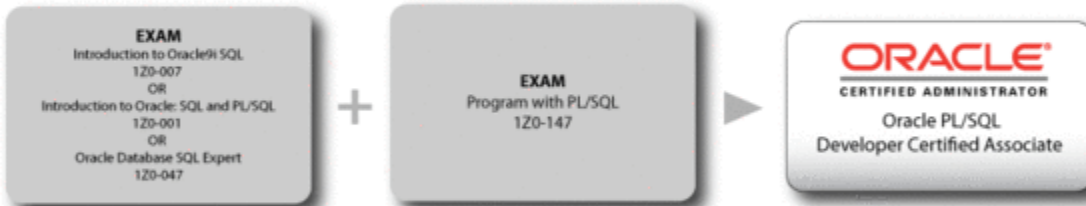


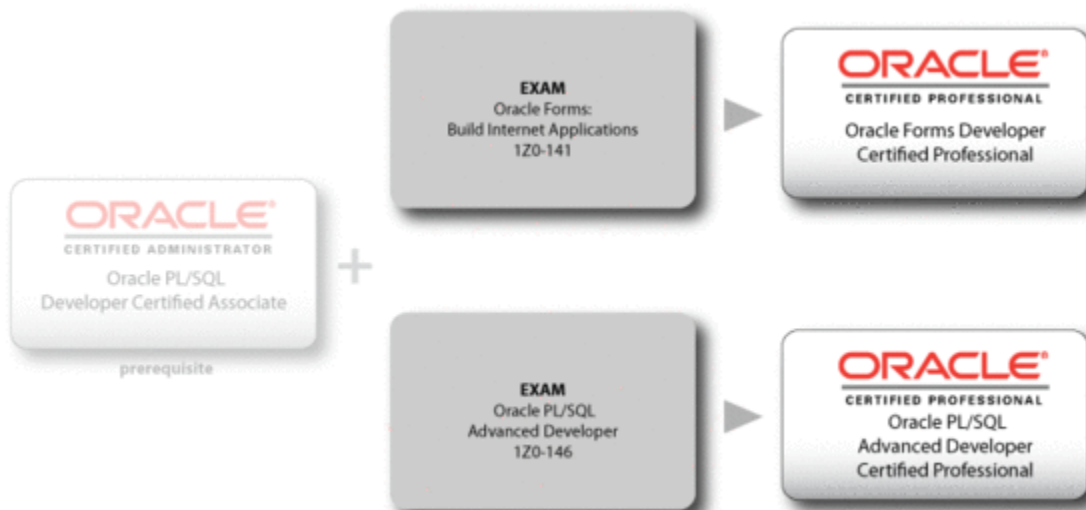
Program Syllabus

Oracle Certification Program
Oracle PL/SQL and Oracle Forms Developer

Oracle Certified Associate



Oracle Certified Professional



SQL AND PL/SQL DEVELOPER WITH ORACLE 11G

Course Outline

Lesson 1: Introduction to Oracle: SQL, PL/SQL, and SQL*Plus

Topics:

- Introduction to SQL*Plus and iSQL*Plus
- Introduction to SQL
- Introduction to PL/SQL

Lesson 2: SQL*Plus Commands

Topics:

- Using SQL*Plus for Editing
- Using SQL*Plus to Work with Files
- Using SQL*Plus for Formatting Output
- Using SQL*Plus Variables

Lesson 3: Filtering and Sorting Data

Topics:

- WHERE Clause
- ORDER BY Clause

Lesson 4: SQL Functions

Topics:

- Expressions in a SELECT Statement
- Single Row Functions
- Group Functions

Lesson 5: Working with Multiple Tables

Topics:

- Joins
- Sub-queries
- Set Operators

Lesson 6: Tables and Constraints

Topics:

- Creating and Modifying Tables
- Integrity Constraints
- Managing Data in Tables
- Transaction Control Language Statements

Lesson 7: Other Database Schema Objects

Topics:

- Sequences, Synonyms, and Indexes
- Views
- Database Object Security

Lesson 8: Building PL/SQL Blocks

Topics:

- Creating PL/SQL Blocks

Manipulating Data in PL/SQL

Lesson 9: PL/SQL Control Structures

Topics:

Conditional Control Structures

Iterative Control Structures

Lesson 10: Cursors

Topics:

Introduction to Cursors

Implicit Cursors

Explicit Cursors

Cursor Loops

Lesson 11: Exception Handling

Topics:

Introduction to Exception Handling

Types of Exceptions

Lesson 12: Procedures and Functions

Topics:

Developing Procedures and Functions

Passing Parameters

Lesson 13: Oracle Packages

Topics:

Developing Packages

Oracle-supplied Packages

Lesson 14: Oracle Triggers

Topics:

Building a Trigger

Trigger Restrictions

Lesson 15: PL/SQL Collections

Topics:

Defining and Using Collections

Collection Methods

ORACLE FORMS

CHAPTER 1: INTRODUCING ORACLE FORMS DEVELOPER AND FORMS SERVICES

- Grid Computing
- Oracle 10g Products
- Oracle Application Server Architecture
- Oracle Forms Services Architecture
- Benefits and Components of Oracle Developer Suite
- Running a Forms Developer Application
- Working in the Forms Developer Environment

CHAPTER 2: CREATING FORMS MODULES

- Creating a Basic Forms Module
- Creating a Master-Detail Forms Module
- Modifying the Data Block
- Modifying the Layout

CHAPTER 3: WORKING WITH DATA BLOCKS AND FRAMES

- Using the Property Palette
- Managing Object Properties
- Creating and Using Visual Attributes
- Controlling the Behavior and Appearance of Data Blocks
- Controlling Frame Properties
- Creating Control Blocks
- Deleting Data Blocks

CHAPTER 4: WORKING WITH INPUT ITEMS

- Creating Text Items
- Controlling the Behavior and Appearance of Text Items
- Creating LOVs
- Defining Editors
- Creating Check Boxes
- Creating List Items
- Creating Radio Groups

CHAPTER 5: WORKING WITH NON INPUT ITEMS

- Creating a Display Item
- Creating an Image Item
- Creating a Push Button
- Creating a Calculated Item
- Creating a Hierarchical Tree Item
- Creating a Bean Area Item

CHAPTER 6: CREATING WINDOWS AND CANVASES

- Overview of Windows and Canvases
- Displaying a Form Module in Multiple Windows
- Creating a New Window
- Displaying a Form Module on Multiple Layouts
- Creating a New Content Canvas
- Creating a Stacked Canvas
- Creating a Toolbar
- Creating a Tab Canvas

CHAPTER 7: PRODUCING TRIGGERS

- Grouping Triggers into Categories
- Defining Trigger Components: Type, Code, and Scope
- Specifying Execution Hierarchy
- Using the PL/SQL Editor
- Using the Database Trigger Editor
- Writing Trigger Code
- Using Variables and Built-ins
- Using the When-Button-Pressed and When-Window-Closed Triggers

CHAPTER 8: DEBUGGING TRIGGERS

- The Debugging Process
- The Debug Console
- Setting Breakpoints
- Debugging Tips
- Running a Form in Debug Mode
- Stepping through Code

CHAPTER 9: ADDING FUNCTIONALITY TO ITEMS

- Coding Item Interaction Triggers
- Defining Functionality for Check Boxes
- Changing List Items at Run Time
- Displaying LOVs from Buttons
- Populating Image Items
- Populating and Displaying Hierarchical Trees
- Interacting with JavaBeans

CHAPTER 10: RUN-TIME MESSAGES AND ALERTS

- Built-Ins and Handling Errors
- Controlling System Messages
- The `FORM_TRIGGER_FAILURE` Exception
- Using Triggers to Intercept System Messages
- Creating and Controlling Alerts
- Handling Server Errors

CHAPTER 11: QUERY TRIGGERS

- Handling Server Errors
- SELECT Statements Issued During Query Processing
- WHERE and ORDER BY clauses and the ONETIME_WHERE property
- Writing Query Triggers
- Query Array Processing
- Coding Triggers for Enter-Query Mode
- Overriding Default Query Processing
- Obtaining Query Information at Run Time

CHAPTER 12: VALIDATION

- Validation Process
- Controlling Validation Using Properties
- Controlling Validation Using Triggers
- Performing Client-Side Validation with PJC's
- Tracking Validation Status
- Using Built-ins to Control When Validation Occurs

CHAPTER 13: NAVIGATION

- Navigation Overview
- Understanding Internal Navigation
- Using Object Properties to Control Navigation
- Writing Navigation Triggers: When-New--Instance, Pre- and Post- Triggers
- The Navigation Trap
- Using Navigation Built-Ins in Triggers

CHAPTER 14: TRANSACTION PROCESSING

- The Commit Sequence of Events
- Characteristics and Common Uses of Commit Triggers
- Testing the Results of Trigger DML
- DML Statements Issued during Commit Processing
- Overriding Default Transaction Processing
- Running against Data Sources Other Than Oracle
- Getting and Setting the Commit Status
- Implementing Array DML

CHAPTER 15: WRITING FLEXIBLE CODE

- What is Flexible Code?
- Using System Variables for Flexible Coding
- Using Built-in Subprograms for Flexible Coding
- Referencing Objects by Internal ID
- Referencing Items Indirectly

CHAPTER 16: SHARING OBJECTS AND CODE

- Benefits of Reusable Objects and Code
- Working with Property Classes
- Working with Object Groups
- Copying and Subclassing Objects and Code
- Working with Object Libraries
- Working with SmartClasses
- Reusing PL/SQL
- Working with PL/SQL Libraries

CHAPTER 17: USING WEBUTIL TO INTERACT WITH THE CLIENT

- Benefits of WebUtil
- Integrating WebUtil into a Form
- Interacting with the Client

CHAPTER 18: INTRODUCING MULTIPLE FORM APPLICATIONS

- Multiple Form Applications Overview
- Starting Another Form Module
- Defining Multiple Form Functionality
- Sharing Data among Modules

ORACLE REPORTS