

Oracle12c Release 2 PL/SQL (5 Days)

Course Description

In this PL/SQL training class, students who already know SQL learn to use PL/SQL to write sophisticated queries against an Oracle database.

Course Topics

1. Learn what PL/SQL is.
2. Learn how to declare, name, assign and output variables in PL/SQL.
3. Learn about data types in PL/SQL.
4. Learn about the main features of PL/SQL.
5. Learn how to write a simple block of PL/SQL code.
6. Learn about subprograms in PL/SQL.
7. Learn to create and call procedures.
8. Learn to create and call functions.
9. Understand BOOLEAN values and expressions.
10. Learn to write IF conditions.
11. Learn to use the CASE statement.
12. Learn to handle exceptions in PL/SQL.
13. Learn about how cursors works.
14. Learn to use implicit cursors.
15. Learn to use explicit cursors.
16. Learn to use packages to group related PL/SQL objects.
17. Learn to use triggers for validating data and auditing changes to the database.

Course Outline

PL/SQL Basics

- What is PL/SQL?
- Blocks
- Outputting Information
- Variables and Constants
- Constants
- Data Types
- Naming Variables and Other Elements
- Embedding SQL in PL/SQL
- SELECT...INTO and RETURNING...INTO
- PL/SQL Features

Subprograms

Introduction to Subprograms

- Procedures
- Variable Declarations
- Dropping a Procedure
- Parameters
- Parameters with Default Values
- Parameter Modes
- IN Mode
- OUT Mode
- IN OUT Mode
- Named Notation
- Using SQL in a Subprogram
- %TYPE
- Functions
- Using PL/SQL Functions in SQL Queries

Conditional Processing

Conditions and Booleans

- IF-ELSIF-ELSE Conditions
- ELSIF
- BOOLEAN Values and Standard SQL
- The CASE Statement
- CASE Expressions

Exceptions

Introduction to Exceptions

- Predefined Exceptions
- The EXCEPTION Part of the Block
- User-defined Exceptions
- User-defined Exceptions in Subprograms
- Re-raising Exceptions
- Naming Unnamed Predefined Exceptions
- WHILE Loops
- When to Use Exceptions

Cursors

Implicit Cursors

- Explicit Cursors
- %ROWTYPE
- Explicit Cursor Use Case
- Cursor FOR LOOP
- Cursor Parameters

Packages

Package Basics

- The Package Specification
- The Package Body
- Building an Employee Package
- Overloading Subprograms
- Auditing
- Validation Procedures
- Package Cursors
- Benefits of Packages

Triggers

What are triggers?

- Trigger Parts
- Validation Triggers
- The WHEN Clause
- Audit Triggers
- Statement-level Triggers
- Compound Triggers
- Trigger Warning

Class Materials

Each student in our Live Online and our Onsite classes receives a comprehensive set of materials, including course notes and all the class examples.

Prerequisite Courses

Courses that can help you meet these prerequisites:

- Oracle SQL