



Oracle Database 12c: PL/SQL Fundamentals I

Course ID#: 0380-072-12-W

Hours: 14

Course Content

Course Description:

This course introduces one to Oracle database programming using the PL/SQL programming language. One will learn the syntax, structure and features of the language. This course will also lay the foundation for the entire Sideris Oracle PL/SQL programming series, allowing one to progress from introductory topics to advanced application design and programming and finally onto writing complex high-performance applications.

PL/SQL may be considered as one of the basic skill sets required for any Oracle professional, nearly as important as the SQL language itself.

Target Student:

The target audience for this course is all Oracle professionals. Among the specific groups for whom this course will be helpful are:

- Application designers and database developers
- Database administrators
- Web server administrators

Topics:

Module 1: Selection & Setup Of The Database Interface

- Considering Available Tools
- Selecting The Appropriate Tool
- Oracle NET Database Connections
- Oracle PAAS Database Connections
- Setup SQL Developer
- Setup SQL*PLUS
- Setup JDeveloper

Module 2: About BIND & SUBSTITUTION Variables

- Using SQL Developer
- Using SQL*PLUS

Module 3: Choosing A Database Programming Language

- What Is Database Programming?
- PL/SQL Performance Advantages
- Integration With Other Languages

Module 4: PL/SQL Language Fundamentals

- PL/SQL Program Structure
- Language Syntax Rules
- Embedding SQL
- Writing Readable Code
- Generating Database Output
- SQL*PLUS Input Of A Program Block



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Module 5: DECLARE Section

- About The DECLARE Section
- DECLARE Primitive Types
- Declaration Options
- NOT NULL
- CONSTANT
- Data Dictionary Integration
- %TYPE
- Declare Simple User--Defined Types
- TYPE ... TABLE
- TYPE ... RECORD
- Extended User--Defined Types

Module 6: BEGIN Section

- About The BEGIN Section
- Manipulating Program Data
- Logic Control & Branching
- GOTO
- LOOP
- IF--THEN--ELSE
- CASE

Module 7: Exception Section

- About The EXCEPTION Section
- Isolating The Specific EXCEPTION
- PRAGMA EXCEPTION_INIT
- SQLCODE & SQLERRM Example
- SQL%ROWCOUNT & SELECT...INTO

Module 8: Beyond The Basics: Explicit Cursors

- About Explicit Cursors
- Extended Cursor Techniques
- FOR UPDATE OF Clause
- WHERE CURRENT OF Clause
- Using FOR...LOOP Cursors

Module 9: Beyond The Basics: Nested Blocks

Module 10: Beyond The Basics: DECLARED Subprograms

- Using DECLARED Subprograms
- DECLARED Procedure
- DECLARED Function