

Oracle PL/SQL Programming and Tuning

Group rates available – Inquire for more details

Duration: 35 hours

Course Content

Basics of PL/SQL

- PL/SQL architecture
- PL/SQL and SQL*Plus
- PL/SQL Basics, Variables, Constants, data types & error handling
- PL/SQL wrapper utility

PL/SQL structures

- Simple blocks
- Control structures
- PL/SQL records
- Recognizing the Basic PL/SQL Block and Its Sections
- Describing the Significance of Variables in PL/SQL
- Distinguishing Between PL/SQL and Non-PL/SQL Variables
- Declaring Variables and Constants
- Executing a PL/SQL Block

Error checking – exception handling

- Defining exceptions
- Using the when others clause
- Ensuring complete error checking
- Passing error messages to calling routine

Boolean logic in PL/SQL

- Identifying the Uses and Types of Control Structures
- Constructing an IF Statement
- Constructing and Identifying Different Loop Statements
- Controlling Block Flow Using Nested Loops and Labels
- Using Logic Tables
- If-then-else structure
- Testing for numbers characters and Booleans

Cursors in PL/SQL

- Cursor basics
- Using a cursor for a multi-row SQL query

Iteration in PL/SQL

- For loop
- While loop

PL/SQL tables

- Defining PL/SQL tables
- Reasons to use PL/SQL tables
- Populating a PL/SQL table
- Retrieving from a PL/SQL table

Dynamic SQL in PL/SQL

- Introduction to the dbms_sql package
- Creating a dynamic SQL statement

Nested blocks in PL/SQL

- Creating nested blocks
- Understanding scope in nested blocks

Triggers in PL/SQL

- Triggers and database events
- Defining a trigger
- Timing a trigger
- Enabling and disabling a trigger

Stored procedures, functions and packages

- Basics of stored procedures
- Basics of functions
- Basics of packages
- Defining stored procedures & functions
- Function and stored procedures prototypes
- Passing arguments to functions and stored procedures
- Recompiling functions and stored procedures
- Pinning packages in the SGA with dbms_shared_pool.keep
- Package forward declaration
- Package dependency
- Package overloading
- Listing package information

Bulking in PL/SQL

- Bulk queries
- Bulk DML (forall statement)
- Using cursor attributes
- Analyzing impact of bulk operations