

Oracle Database PL_SQL : (16 hrs.)

Rs.12000/-

What you will Learn

Identify the programming extensions that PL/SQL provides to SQL.

Write PL/SQL code to interface with the database.

Design PL/SQL anonymous blocks that execute efficiently.

Use PL/SQL programming constructs and conditional control statements.

Seamlessly integrate procedural constructs with SQL.

Handle run-time errors.

Create stored procedures and functions, Packages , Triggers with Transactions

Course Objectives

Identify the steps for getting started with PL/SQL, recognizing the benefits of the available tools

Identify the steps for using PL/SQL to manipulate data, control transactions, determine the outcome of statements, and create loops and conditional control structures

Recognize ways to create user-defined PL/SQL records and INDEX BY tables, and identify the steps for declaring and controlling explicit cursors and cursors with parameters

Recognize ways to handle unanticipated errors in PL/SQL, write stored procedures and functions and use cursor variables

Required Pre-requisites

Basic Knowledge of Oracle SQL

Set Up and Installation Details

For Online Session – Internet required

First Demo Session inclusive of the Cost will cover the installation on Windows Machine(Not Linux)

Either 32x/64x

Snapshots on How to get the Oracle Database s/w with SQL developer from the oracle website will also be shared with Snapshots, post registration process.

Registration Process Details

You need to call the Trainer, Confirm your Time Slots

Trainer will confirm availability in a mail

A Demo Session will be arranged

Post which you have to pay 100% fees (Not refundable, unless training cannot happen)

All communication will be done on Mail.

Course Coverage Details Session Wise breakup

Session 1 :Introduction to PLSQL

- **Overview of PL/SQL**
- **Identify the benefits of PL/SQL Subprograms**
- **PL/SQL Blocks**
- **Creating Simple anonymous Block**

PL/SQL Identifiers and Executable Statements

- **Identifiers types**
- **Identifiers Declarative Section**
- **Variables**
- **Scalar Data Types**
- **%TYPE Attribute**
- **Bind Variables**
- **PL/SQL Block Syntax**
- **Nested Block**
- **Invoke Select Statement in PL/SQL**
- **Retrieve Data in PL/SQL**
- **DML in the server using PL/SQL**

Session 2: PL/SQL Control Structures

- **IF Statement**
- **CASE Statement**
- **Loop Statement**
- **While Loop**
- **For Loop**
- **Continue**

PL/SQL Control Structures & Composite DataTypes

- **IF Statement**
- **CASE Statement**
- **Loop Statement**

- **While Loop**
- **For Loop**
- **Continue**
- **PL/SQL Records**
- **%ROWTYPE Attribute**

Session 2-3 Cursor and Exception Handling

- **Use of Explicit Cursor**
- **Declare, Open, Fetch, Close Cursor**
- **Cursor For Loop**
- **%NOTFOUND and %ROWCOUNT Attribute**
- **Understand Expectations**
- **Handle Exceptions with PL/SQL**
- **Non-Predefined Oracle Server Errors**
- **Propagate Exceptions**
- **RAISE_APPLICATION_ERROR Procedure**

Session 4 Stored Procedure and Functions

- **Modularizing with PL/SQL Blocks**
- **Benefits for PL/SQL Sub Programs**
- **Difference between Anonymous block and Subprogram**
- **Create, Call and Remove Stored Procedure**
- **Parameters in Stored Procedure**
- **View Procedure information**
- **Advantage of using Stored Function**
- **Difference between Procedure and Stored Function**
- **Create, Call and remove Stored Function**
- **Invoke User-Defined Functions in SQL**

Session 5-6 Packages & Triggers

- **Packages - Maintaining State of Data**
- **Advanced Reference Cursor Mechanisms**
- **Database – DDL- DML – Triggers**
- **Introduction to Autonomous Transactions**

Session 7-8 Collections

- **INDEX BY Table**

- **INDEX BY Table of Records**
- **Varrays (ORDBMS)**
- **Nested Tables (ORDBMS)**
- **Using collections In Packages**
