

# PL/SQL Course Content

- Introduction to PL/SQL
  - What is PL/SQL?
  - Advantages of PL/SQL
  - Overview of PL/SQL Architecture
- PL/SQL Basics
  - PL/SQL Block Structure
  - Declaring Variables
  - Data Types
  - Control Structures: IF, CASE, LOOP
  - Handling SQL in PL/SQL
- Cursors
  - Introduction to Cursors
  - Implicit vs. Explicit Cursors
  - Cursor Attributes
  - FOR Loop Cursors
- Exception Handling
  - Types of Exceptions
  - Handling Exceptions
  - RAISE\_APPLICATION\_ERROR
- Stored Procedures and Functions
  - Creating Procedures
  - Creating Functions
  - Parameter Modes: IN, OUT, IN OUT
  - Using Procedures and Functions
- Packages
  - What are Packages?
  - Creating a Package
  - Package Specification and Body

- Using Package Elements
- Triggers
  - Introduction to Triggers
  - Creating DML Triggers
  - Trigger Firing Points
  - INSTEAD OF and Compound Triggers
- Collections
  - Types of Collections
  - Associative Arrays
  - Nested Tables
  - Varrays
  - Using Collection Methods
- Dynamic SQL
  - Introduction to Dynamic SQL
  - Using EXECUTE IMMEDIATE
  - DBMS\_SQL Package
- Performance Tuning
  - Identifying Performance Issues
  - Optimizing PL/SQL Code
  - Bulk Collect and FORALL
- Advanced PL/SQL
  - Working with Large Objects (LOBs)
  - Working with XML
  - Using PL/SQL with JSON