Oracle

Description

Our Oracle instructor led training course is designed to give a firm foundation on Oracle Database which will cover SQL and PL/SQL concepts which are required to create database objects like tables, views, stored procedures, functions, triggers etc. and also gives idea about writing queries and sub-queries with Joins.

Expectations and Goals

After the completion of the Oracle Course at Ardent, you should be able to:

- Learn how to write basic SQL queries, sorting and filtering data.
- Write DDL and DML queries to create and manage database tables.
- Explore different types of functions available in SQL.
- Apply different joining techniques to database tables and sub queries exploit the concepts like view, sequence, and index synonym. Utility of TCL Command and DCL Command Understand the need of PL/SQL.
- Create cursors and deal with exceptions.
- Learn to use procedures and functions.
- Create packages and triggers.
- Concept of ORDBMS.
- Handling LOB Data Type.

Prerequisites

Basic Knowledge of Computer.

Course Schedule

Module	Topic
Module 1	**Introduction to DBMS & RDBMS** Normalization E R Diagram
Module 2	**Basic SQL Construct** Arithmetic Operation and Expressions Importance of NULL values and Concatenate operators Column naming conventions Restricting and Sorting Data Applying where and order by clauses Pattern matching using LIKE IN Operator Logical AND, OR and NOT operators Between and Not Between conditions
Module 3	**Data Definition Language (DDL)** Create Alter Rename Truncate Drop Purge Data Manipulation Language (DML) Inserting rows Updating rows

	Deleting rows
	Merge Statement
Module 4	**Functions in SQL and Subquery**
	Single Row Functions
	Character functions
	Number functions
	Date functions
	Other functions (NVL,NVL2,COALESCE,decode)
	Multi Row Functions
	Aggregate functions
	Group by clause
	Group by clause with NVL function
	Having clause
	Subquery
	Need of subqueries
	Types of subqueries
	Subquery operators
Module 5	**Joining Tables,TCL Command &DCL Command**
	Inner Join, Outer Join, Left outer, Right outer,
	Full outer, Non Equi-Join,Self-Join
	TCL command
	Commit,rollback,save point
	DCL command
	Grant, Revoke
Module 6	**View,Sequence,Index,Synonym**
	Views
	Need of views
	Creating and Querying a view
	Simple and Complex Views
	DML on views
	Sequence
	Index
	Synonym
Module 7	**Introduction to PL/SQL**
	Basics of PL/SQL
	PL/SQL block structure
	Data types and variables
	Operators and %TYPE attribute
	Writing a PL/SQL program
	Control Structures
	IF-THEN-ELSE statement
	Basic, while and for loops
	%ROWTYPE attribute

Module 8	**Cursors and Exception Handling** Introduction to cursors Types of cursors Creating, using and deleting a cursor Cursor attributes Exception Handing Need of handling exception Predefined and non-predefined exceptions User defined exceptions Raising and trapping exceptions
Module 9	**Procedures and Functions** Need of procedures Block structure of a procedure Creating and invoking a procedure with IN and OUT parameters Altering and Dropping a procedure Need of functions over procedures Block structure of a functions Creating and invoking a function Altering and Dropping a function
Module 10	**Packages and Triggers** Concept of a package Creating a package using package header and package body Invoking package members in a PL/SQL program with an example Dropping a package Definition of trigger Creating a DDL trigger with an example Creating a DML trigger with an example Dropping a trigger
Module 11	**ORDBMS** Object VArray Nested Table
Module 12	**Handling LOB Data Types** CLOB BLOB
Module 13	**Architecture Of Oracle**
Module 14	**Export And Import** **DataPump**
Module 15	**Loading Data From Flat File into the Table** SQLLOADER
Module 16	**Performance Tuning** Index Materialized view Cache Table Partitioned Table
Module 17	Project work and documentation