

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
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 Handling Need of handling exception Predefined and non-predefined exceptions User defined exceptions Raising and trapping exceptions

Module 9	<p>Procedures and Functions</p> <ul style="list-style-type: none"> 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	<p>Packages and Triggers</p> <ul style="list-style-type: none"> 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	Project work with documentation