

# Course Outline | Oracle SQL Part 1 - Introduction

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3 day(s)

## Objectives

At the end of the course the delegate should be able to :

- Understand Oracle terminology.
- Insert, update, and delete data from Oracle tables.
- Produce query output from oracle data.
- Understand and use the data dictionary.
- Format queries in to Reports.

## Target Student

The course is suitable for any personnel involved in the maintenance of Oracle applications and databases who have little or no knowledge of SQL and who wish to construct their own queries and reports as well as basic update, insert and delete operations. The course is a pre-requisite for the Database Administration and PL/SQL range of courses.

## Prerequisites

A reasonable degree of computer literacy is required. No previous knowledge of SQL is required.

## Course Outline

Introduction to SQL.

- What is SQL and What is it Used For?
- Identifying table Structures
- Using the Data Dictionary

The SELECT Statement

- Mandatory Clauses
- SELECT and FROM Clauses
- The WHERE Clause
- Filtering data – including and excluding records
- The ORDER BY Clause
- Sorting operations

Using Functions to convert, format and summarize data.

- Numeric, Character, and Miscellaneous Functions
- Group Functions SUM,AVG,COUNT,STDDEV
- GROUP BY and HAVING Clauses

Joining Tables.

- Standard Table Joins
- Cartesian Products
- Inner and Outer Joins
- Self Referencing Table Joins
- ANSI compliant statements

Basic Sub-queries.

- Queries within Queries
- Basic Sub Queries correlated and uncorrelated
- EXISTS and NOT EXISTS Clauses

Data Manipulation

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- Inserting Data Into Tables
- Updating Data
- Deleting Data

Creating Simple Scripts and Saving Output.

- Saving your Queries
- Generating SQL from SQL
- Spooling Output
- Substitution Variables.
- Lexical and Bind variables

Report Formatting.

- SQLPLUS environment settings
- Page Settings
- Page Titles
- Page Numbering

Users, Privileges and Synonyms and Security.

- Changing your password
- Understanding Oracle data security.

Table Locking.

- Commit and Rollback
- Table and Row Level Locking
- Assigning your own Locking Level

SQL\*Plus Performance Tuning, using Explain Plan

- Basic Performance Tuning
- Table and Row Level Locking
- Assigning your own Locking Level

Export Report Using SQL Developer\*\*