Oracle Database 11g: SQL Fundamentals (40 hrs.)

This course introduces students to the fundamentals of SQL using Oracle Database 11g database technology. In this course students learn the concepts of relational databases and the powerful SQL programming language. This course provides the essential SQL skills that allow developers to write queries against single and multiple tables, manipulate data in tables, and create database objects.
The students also learn to use single row functions to customize output, use conversion functions and conditional expressions and use group functions to report aggregated data. Demonstrations and hands-on practice reinforce the fundamental concepts.
In addition, this course is designed for application developers with basic SQL language skills. In this course, students learn to control privileges at the object and system level. This course covers creating indexes and constraints, and altering existing schema objects. Students also learn to create and query external tables and use the advanced features of SQL to query and manipulate data within the database. In this course, students use Oracle SQL Developer as the main tool and SQL*Plus is introduced as an optional tool.

Prerequisites

* Familiarity with data processing concepts and techniques

Course Topics

* Introduction
* Retrieving Data Using the SQL SELECT Statement
* Restricting and Sorting Data
* Using Single-Row Functions to Customize Output
* Using Conversion Functions and Conditional Expressions
* Reporting Aggregated Data Using the Group Functions
* Displaying Data From Multiple Tables
* Using Sub-queries to Solve Queries
* Using the SET Operators
* Manipulating Data
* Using DDL Statements to Create and Manage Tables
* Creating Other Schema Objects
* Controlling User Access
* Managing Schema Objects
* Managing Objects with Data Dictionary Views
* Manipulating Large Data Sets
* Managing Data in Different Time Zones
* Retrieving Data Using Subqueries
* Regular Expression Support