

### **Oracle SQL**

#### Overview:

The Oracle SQL course is designed to give delegates practical experience in writing SQL statements and scripts using Oracle SQL. The basic SELECT statement, the use of SQL functions and the basic table and view handling statements are introduced. Versions supported 11gR2,12cR2,18c,19c.

#### Company Events

These events can be delivered exclusively for your company at our locations or yours, specifically for your delegates and your needs. The Company Events can be tailored or standard course deliveries.

### **Target Audience:**

Anyone who needs to use and understand Oracle SQL to query and update data in an Oracle database.

## Objectives:

To provide the skills needed to query and update data held in an Oracle Relational Database.

### Prerequisites:

There are no formal pre-requisites for the Oracle SQL course, although an understanding of databases and exposure to information technology in general would be useful.

## Follow-on-Courses:

- Oracle PL/SQL (OPI)
- Oracle SQL Advanced (OSA)
- Oracle 19c SQL Performance Tuning (O19CSPT)
- Oracle Database 19c Administration (O19CDBA)

#### Content:

Oracle SQL Training Course Course Contents - DAY 1

## Session 1: RELATIONAL DATABASE CONCEPTS

- What is an Oracle Database
- Relational Database Structures
- Tables,Rows and Columns
- Indexes, Primary Keys and Foreign Keys
- Data Types
- The Data Dictionary

#### Session 2: USING SQL\*PLUS

- What is SQL\*Plus
- Getting Started
- Entering and Executing SQL Statements
- The SQL\*Plus Command Line History
- Editing SQL Statements
- The login.sql File
- Creating, Editing and Executing SQL Files
- The SQLcl Utility

#### Session 3: USING SQL DEVELOPER

- What is Oracle SQL Developer
- Starting SQL Developer
- Configure a Connection
- Navigation Tabs
- SQL Worksheet
- Query Builder

## Session 4: RETRIEVING DATA WITH THE SELECT STATEMENT

- The SELECT Statement
- The SELECT and FROM Clauses
- Conditions and the WHERE Clause
- Other Conditional Operators
- Logical Operators
- The ORDER BY Clause
- Column Aliases
- Arithmetic Expressions
- Precedence of Operators
- Markup CSV

#### Session 5: AGGREGATE FUNCTIONS

- Overview of Built In Aggregate Functions
- The GROUP BY Clause
- The HAVING Clause

#### Session 6: JOINING TABLES

- Overview of Table Joins
- Inner Joins
- Table Aliases
- Outer Joins
- Self Joins
- ANSI Standard Joins

# Session 7: BASIC SUBQUERIES AND SET OPERATORS

- Overview of Subqueries
- Basic Subqueries
- Set Operators
- The Union, Intersect and Minus Operators Oracle SQL Training Course Course Contents - DAY 2

# Session 8: NUMERIC, CHARACTER AND DATE FUNCTIONS

- Function Types
- Using the Table dual to try out Functions
- Numeric Functions
- Character Functions
- String Concatenation
- Date Arithmetic and Date Functions

# Session 9: CONVERSION AND MISCELLANEOUS FUNCTIONS

- Conversion Functions
- The NVL and NVL2 Functions
- The DECODE Function
- CASE Expressions
- The COALESCE and NULLIF Functions

#### Session 10: SQL PARAMETERS

- Command Line Substitution Parameters
- The Accept Command
- The Define and Undefine Commands

### Session 11: COMPLEX SUBQUERIES

- Subqueries Usage
- In-Line Views
- Top-N Queries
- Subqueries with Joins
- Multi Column Subqueries
- Correlated Subqueries
- Subquery Rules
- Using the ANY,ALL and SOME

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#### Session 12: MANAGING DATA

- Inserting Rows
- Updating Rows
- Deleting Rows
- Verifying Updates
- Transaction Control
- Commit and Rollback
- Savepoints
- Commits and Constraints
- Amending Data in SQL Developer

#### Session 13: MANAGING TABLES

- Creating Tables
- Specifying Constraints
- Altering Tables, Columns and Constraints
- Dropping Tables, Columns and Constraints
- Recovering Dropped Tables
- Copying Tables

## Session 14: MANAGING INDEXES AND VIEWS

- Creating Indexes
- Dropping Indexes
- Listing Indexes
- Creating and Using Views
- Dropping Views
- Listing Views

# Session 15: MANAGING SEQUENCES AND SYNONYMS

- Create a Sequence
- View Sequence Details
- Create a Synonym
- List Synonyms

## Further Information:

For More information, or to book your course, please call us on Head Office 01189 123456 / Northern Office 0113 242 5931 <a href="mailto:info@globalknowledge.co.uk">info@globalknowledge.co.uk</a>

www.globalknowledge.com/en-gb/

Global Knowledge, Mulberry Business Park, Fishponds Road, Wokingham Berkshire RG41 2GY UK