Oracle SQL & PL/SQL Fundamentals

Duración: 5 Días **Código del Curso: OFUN**

Temario:

Oracle SQL & PL/SQL Fundamentals Course Overview

English - Please note this course is only available in English.
Español - Por favor, tenga en cuenta que esta formación solo está disponible en inglés.
The Oracle SQL & PL/SQL Fundamentals course is designed to give delegates practical experience in writing SQL statements and s

Dirigido a:

Who will the Course Benefit?

Anyone who needs to use and understand Oracle SQL to query and update an Oracle database; and who also needs an introduction to the PL/SQL programming language.

Objetivos:

- Course Objectives
- To provide the skills needed to query and update data held in an Oracle Relational Database.
- To provide an introduction to Oracle PL/SQL as a preparation for other Oracle products such as Forms and Reports.

Prerequisitos:

- There are no formal pre-requisites for the Oracle SQL & PL/SQL Fundamentals course,although an understanding of databases and exposure to information technology in general would be useful. This knowledge can be gained by attendance on the Relational Databases & Data Modelling Overview course.

Siguientes cursos recomendados:

Further Learning

- Oracle PL/SQL Stored Program Units
- Oracle Database 19c Administration

Contenido:

Oracle SQL ; PL/SQL Fundamentals Training Course Course Contents - DAY 1

Course Introduction

- Administration and Course Materials
- Course Structure and Agenda
- Delegate and Trainer Introductions

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
- Editing SQL Statements
- Creating,Editing and Executing SQL Files

Session 3: USING SQL DEVELOPER

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

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

Session 5: AGGREGATE FUNCTIONS

- Overview of Built In Aggregate Functions
- The GROUP BY Clause
- The HAVING Clause Oracle SQL ; PL/SQL Fundamentals Training Course Course Contents - DAY 2

Session 6: JOINING TABLES

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

Session 7: 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 8: CONVERSION AND MISCELLANEOUS FUNCTIONS

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

Session 9: SQL*PLUS PARAMETERS

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

Session 10: USING SUBQUERIES

- Overview of Subqueries
- Use a Subquery as an Alternative to Join
- Handle Multiple Records in Subqueries
- Subquery in a Having Clause
- Anti-Join
- In-Line Views
- Top-N Queries
- Complex Subqueries
- Multi Column Subqueries
- Correlated Subqueries
- Subquery Rules
- Combining Unrelated Aggregates
- Using the ANY,ALL and SOME Operators Oracle SQL ; PL/SQL Fundamentals Training Course Course Contents - DAY 3

Session 11: MANAGING DATA

- Inserting Rows
- Updating Rows
- Deleting Rows
- Verifying Updates
- Transaction Control
- Commit and Rollback
- Savepoints
- Commits and Constraints

Session 13: MANAGING INDEXES AND VIEWS

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

Session 14: MANAGING SEQUENCES AND SYNONYMS

- Create a Sequence
- View Sequence Details
- Create a Synonym
- List Synonyms Oracle SQL ; PL/SQL Fundamentals Training Course Course Contents - DAY 4

Session 15: PL/SQL FUNDAMENTALS

- What is PL/SQL?
- Basic Elements
- Variables and Constants
- Data Types
- Initialising Variables and Assigning Values
- Using SQL Statements in Code
- Generating Output to SQL or SQL Developer

Session 16: PROGRAM LOGIC

- IF THEN ELSIF ELSE Statements
- CASE Statements
- The Basic Loop Construct
- WHILE and FOR Loops
- Nested and Labelled Loops
- The GOTO Statement
- The CONTINUE Statement

Session 17: USING CURSORS

- What is a Cursor?
- Implicit and Explicit Cursors
- Cursor Operations
- Declaring,Opening and Closing Cursors
- Fetching Rows
- Status Checking
- Using Cursors FOR UPDATE
- The Cursor FOR Loop
- Parameterised Cursors Oracle SQL ; PL/SQL Fundamentals Training Course Course Contents - DAY 5

Session 18: EXCEPTIONS AND NESTED BLOCKS

- The EXCEPTION Section
- Types of Exception
- Handling Named System-Raised Exceptions
- Handling Un-named System-Raised

- Amending Data in SQL Developer

Session 12: MANAGING TABLES

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

Exceptions

- User-Declared Exceptions and Application Errors
- WHEN OTHERS THEN NULL
- Nested and Labelled Blocks
- Propagation of Exceptions
- Scope of Variables and Cursors
- Scope of Goto Statements

Session 19: PL/SQL RECORDS AND INDEX-BY TABLES

- Declaring Record Types
- Handling PL/SQL Records
- Nested Records
- Declaring PL/SQL Index-By Tables or Associative Arrays
- PL/SQL Table Built-in Functions
- Manipulating PL/SQL Tables or Associative Arrays

Más información:

Para más información o para reservar tu plaza llámanos al (34) 91 425 06 60

info.cursos@globalknowledge.es

www.globalknowledge.com/es-es/

Global Knowledge Network Spain, C/ Retama 7, 6ª planta, 28045 Madrid