SQL Advanced

Queries

Overview:

SQL is an essential skill for data professionals and developers working with SQL databases. With this combination of expert instruction, demonstrations, and practical activities, learn to write complex SQL queries.

Prerequisites:

To successfully understand the content and complete activities students must have a basic understanding of SQL and should be comfortable with creating SELECT queries.

Who should attend:

This course will suit Database Administrators, Application Developers and other users who require access to their database in an efficient manner.

Benefits:

- Understanding join types and their limitations
- Use subqueries
- Filter grouped data using subqueries
- Perform multi-level subqueries
- Summarise data

Learning Outcomes:

- Use subqueries to generate query output.
- Manipulate table data
- Manipulate the table structure.
- Create views and manipulate data through views
- Modify the view structure
- Drop views.
- Create indices on table columns
- Drop inefficient indices.
- Mark the beginning of a transaction
- Create a savepoint within a transaction
- Rollback a transaction
- Commit a transaction.

Version(s):

2 days

Course times:

9:00am-4:30pm

$ 1210.00

To book this course:

Call: 1300-2-GO-CTS

Web: www.ctstraining.com.au
Email: info@ctstraining.com.au

Certificate of Attendance
Non-accredited course

Content:

Learning Outcomes

- Be able to write complex SQL Queries
- Understand Performance implications when writing SQL
- Be able to interrupt QEPs and generate better SQL
- Gain a thorough understanding of the syntax and semantics of SQL statements

Predicates

- Comparison
- Like Predicates
- Between Predicates
- In Predicates
- Any All or Some Predicates
- Using Subqueries Effectively
- Subquery Rules
- Correlated Subqueries
- EXISTS Predicate
- Scalar Functions

Using subqueries to Perform Advanced Querying

- Search Based on Unknown Values
- Compare a Value with Unknown Values
- Search Based on the Existence of Records
- Generate Output Using Correlated Subqueries
- Filter Grouped Data Within Subqueries
- Perform Multiple-Level Subqueries

Joins

- Unions
- Types of Joins
- Formulation of Join
- Outer Joins
- Caveats
- Self Joins
- Limitations of Joins

Summarizing Data

- Aggregate Functions
- Aggregate Queries
- Aggregate Quotes
- Set Functions
- Grouping

Managing Data Sequentially

- Cursors
- Cursor Solution
- Select Cursor

Manipulating Table Structure

- Create a Table
- Create a Table with Constraints
- Add and Drop Table Columns
- Add and Drop Constraints
- Modify the Column Definition
- Back Up Tables
- Delete Tables

Working with Views

- Create a View
- Manipulate Data in Views
- Create Aliases
- Modify and Drop Views

Query Optimization

- Indexes
- Statistics
- Query Flattening
- Disjunctive Normal Form
- Function Queries

Managing Transactions

- Create Transactions
- Commit Transactions