

Price: R8,400.00 excl. VAT
Duration: 3 days
Delivery: Virtual classroom or
on-site training

Intermediate SQL Queries

Description

The Intermediate SQL Queries course is for people who can write basic SQL queries and want to write more advanced queries. It focuses on more advanced data filtering techniques using subqueries, joins and set operators.

Please note that the course is not specific to any particular database system.

Objectives

After you have completed the Intermediate SQL Queries course, you will be able to:

- Write more advanced queries.
- Use functions in different clauses.
- Use subqueries in different clauses and statements.
- Create more advanced join conditions and queries.
- Use set operators in SQL.
- Create views and derived tables.

Intended Audience

You should attend the Intermediate SQL Queries course if:

- You can write basic SQL queries but need to be able to extract data from multiple tables.
- You want to improve your SQL queries.

Prerequisites

Before you attend the Intermediate SQL Queries course:

- You must have attended our SQL Fundamentals course or already be comfortable with writing basic SQL queries.

Course Contents

SQL Fundamentals

- Entity integrity and referential integrity.
- Structure of the SELECT statement.
- Arithmetic, comparison, assignment and logical operators.
- Special SQL operators: BETWEEN, IS NULL, LIKE, IN.
- Aggregate functions: SUM, AVERAGE, MAX, MIN and COUNT.
- The GROUP BY and HAVING clauses.

Intermediate SQL Functions

- Functions for string and number manipulation.

- Date functions and date arithmetic.
- Converting data types.
- Formatting numeric values.
- The COALESCE function.
- CASE statements.
- Window functions.
- Using functions in other clauses.
- The LIMIT clause.

Subqueries

- Creating sub-queries.
- The use of ALL and ANY in subqueries.
- Correlated subqueries.
- Subqueries in the FROM clause.
- Subqueries in INSERT and UPDATE statements.

Table Joins

- Extracting data from multiple tables through table joins.
- Types of joins.
- Combining multiple tables with different joins.
- Using GROUP BY on joined tables.
- Using HAVING on joined tables.

Set Operations

- The UNION operator.
- The INTERSECT operator.
- The EXCEPT operator.

Additional Topics

- Derived or temporary tables.
- Rotating rows into columns.
- Creating and using views.
- Introduction to procedures.
- Introduction to transactions.
- Commit and rollback in transactions.

*** The lecturer reserves the right to modify the contents of the course to suit the needs of the delegates.*