Introduction to Oracle SQL

2 day training course

Course contents

This course will cover the following topics. Those marked with (*) will be covered if time allows.

Getting started with Oracle (*)

- Installing Oracle Database
- Using Oracle SQL Developer
- Creating database connections
- Understanding users and schemas

About relational databases (*)

- Designing databases
- Primary keys
- Field types in Oracle

Working with tables (*)

- Creating tables
- Allowing nulls or not
- Identity columns
- Creating relationships

Simple queries (*)

- Creating queries
- Comments
- Indentation and case
- Ordering results

Setting criteria using WHERE (*)

- Wildcards using LIKE
- Setting criteria for dates
- Coping with nulls
- Combining criteria

Calculations (*)

- Calculated columns
- Using aliases
- String functions
- Dealing with nulls

Calculations using dates (*)

- Using the DUAL table
- Converting dates
- Formatting dates
- Date arithmetic

Basic joins (*)

- Inner joins
- Table aliases
- Left and right outer joins
- Finding unmatched rows

Aggregation and grouping (*)

- SUM, AVG, MIN and MAX
- Various ways to count
- Grouping by fields
- Using HAVING to filter results

Views (*)

- Turning queries into views
- Saving and editing views
- Replacing views
- Limitations of ordering in views

Subqueries (*) (*)

- The concept of a subquery
- Syntax of subqueries
- Using subqueries in criteria
- Using IN and EXISTS

Inline views and CTEs (*) (*)

- Using inline views
- Common Table Expressions
- Multiple CTEs in a single query