

**Chapter 1: CASE**

You will learn:

- The use of SQL CASE expression.
- WHEN clause.
- Raise an Error in CASE statement.
- Coding UNION and UNION ALL clauses.
- UNION keyword in UPDATE statement.
- Unions in views.

**Chapter 2: Modifying Data**

You will learn:

- Views and expressions.
- NULL and DEFAULT keywords.
- How to utilize the different inserts - single row, from another table, and inserting data into a ROWID Column.
- Inserting using expressions and self-referencing SELECT.
- Updates using SELECT.
- DELETE statement.

**Chapter 3: UDT: User-defined Distinct Types**

You will learn:

- UDT: User-defined distinct types.
- Creating distinct data types.
- How to code and use built-in functions.

**Chapter 4: Row Expressions**

You will learn:

- Row expressions.
- How to create and test summary queries.
- ORDER BY clause.
- GROUP BY clause.
- HAVING clause.
- UNION keyword.
- WITH clause.
- Common table expressions.
- NULL evaluation.
- Recursive programming.

**Chapter 5: EXPLAIN**

You will learn:

- EXPLAIN facilities.
- PLAN\_TABLE
- Executing the SQL statement EXPLAIN.
- Interpret values in the EXPLAIN tables.
- Estimating a statement's cost.
- Creating a statement table.
- Retrieving rows from a statement table.

**Chapter 6: Functions: Advanced Use**

You will learn:

- SQL coding techniques.
- Aggregation.
- Scalar fullselects.

**Chapter 7: Tuning SQL**

You will learn:

- Coding efficient predicates.
- Declaring lengths of host variables.
- Subqueries in a query.
- Queries with aggregate functions.
- Materialized query tables and the impact on query performance.
- BT - Boolean Term predicates.
- Predicates in the ON clause.
- Predicate filter factors and interpolation formulas.
- OPTIMIZE FOR and FETCH FIRST.
- VOLATILE keyword when creating or altering tables.