Relational Database concepts

* Explaining the theoretical and physical aspects of a relational database
* Relating clauses in SQL Select Statement to Components of an ERD
* Explaining the relationship between a database and SQL

Retrieving Data using the SQL SELECT Statement

* Using Column aliases
* Using The SQL SELECT statement
* Using concatenation operator, literal character strings, alternative quote operator, and the DISTINCT keyword
* Using Arithmetic expressions and NULL values in the SELECT statement

Restricting and Sorting Data

* Applying Rules of precedence for operators in an expression
* Limiting Rows Returned in a SQL Statement
* Using Substitution Variables
* Using the DEFINE and VERIFY commands
* Sorting Data

Using Single-Row Functions to Customize Output

* Manipulating strings with character functions in SQL SELECT and WHERE clauses
* Performing arithmetic with date data
* Manipulating numbers with the ROUND, TRUNC and MOD functions
* Manipulating dates with the date function

Using Conversion Functions and Conditional Expressions

* Applying the NVL, NULLIF, and COALESCE functions to data
* Understanding implicit and explicit data type conversion
* Using the TO\_CHAR, TO\_NUMBER, and TO\_DATE conversion functions
* Nesting multiple functions

Reporting Aggregated Data Using Group Functions

* Restricting Group Results
* Creating Groups of Data
* Using Group Functions

Displaying Data from Multiple Tables

* Using Self-joins
* Using Various Types of Joins
* Using Non equijoins
* Using OUTER joins
* Understanding and Using Cartesian Products

Using Subqueries to Solve Queries

* Using Single Row Subqueries
* Using Multiple Row Subqueries
* Update and delete rows using correlated subqueries

Using SET Operators

* Matching the SELECT statements
* Using the ORDER BY clause in set operations
* Using The INTERSECT operator
* Using The MINUS operator
* Using The UNION and UNION ALL operators

Managing Tables using DML statements

* Managing Database Transactions
* Controlling transactions
* Perform Insert, Update and Delete operations
* Performing multi table Inserts
* Performing Merge statements

Managing Indexes Synonyms and Sequences

* Managing Indexes
* Managing Synonyms
* Managing Sequences

Use DDL to manage tables and their relationships

* Describing and Working with Tables
* Describing and Working with Columns and Data Types
* Creating tables
* Dropping columns and setting column UNUSED
* Truncating tables
* Creating and using Temporary Tables
* Creating and using external tables
* Managing Constraints

Managing Views

* Managing Views

Controlling User Access

* Differentiating system privileges from object privileges
* Granting privileges on tables
* Distinguishing between granting privileges and roles

Managing Objects with Data Dictionary Views

* Using data dictionary views

Managing Data in Different Time Zones

* Working with CURRENT\_DATE, CURRENT\_TIMESTAMP,and LOCALTIMESTAMP
* Working with INTERVAL data types