

ORACLE DATABASE 19C: SQL WORKSHOP

Course Duration: 5 days/35 hours; Instructor-led/
remote online training

Time: 9.00am – 5.00pm

Break: 10.15am – 10.30am / 3.15pm – 3.30pm

Lunch: 1.00pm – 2.00pm

WHAT YOU WILL LEARN

This Oracle Database: Introduction to SQL training helps you write subqueries, combine multiple queries into a single query using SET operators and report aggregated data using group functions. Learn this and more through hands-on exercises.

Learn To:

- Understand the basic concepts of relational databases ensure refined code by developers.
- Create reports of sorted and restricted data.
- Run data manipulation statements (DML).
- Control database access to specific objects.
- Manage schema objects.
- Manage objects with data dictionary views.
- Retrieve row and column data from tables.
- Control privileges at the object and system level.
- Create indexes and constraints; alter existing schema objects.
- Create and query external tables.

Benefits to You

Ensure fast, reliable, secure and easy to manage performance. Optimize database workloads, lower IT costs and deliver a higher quality of service by enabling consolidation onto database clouds.

Learn Advanced Features of SQL

This course will help you understand the advanced features of SQL. Learning these features will help you query and manipulate data within the database, use the dictionary views to retrieve metadata and create reports about their schema objects. Some of the date-time functions available in the Oracle Database are also covered. This course also discusses how to use the regular expression support in SQL through expert instruction.

AUDIENCE

- Administrator
- Analyst
- Developer

- Systems Administrator

METHODOLOGY

This program will be conducted with interactive lectures, PowerPoint presentation, discussion, and practical exercise.

COURSE OBJECTIVES

- Identify the major structural components of the Oracle Database 12c
- Create reports of aggregated data.
- Write SELECT statements that include queries.
- Retrieve row and column data from tables.
- Run data manipulation statements (DML) in Oracle Database 12c
- Create tables to store data.
- Utilize views to display data.
- Control database access to specific objects
- Manage schema objects.
- Display data from multiple tables using the ANSI SQL 99 JOIN syntax
- Manage objects with data dictionary views.
- Write multiple-column sub-queries.
- Employ SQL functions to retrieve customized data.
- Use scalar and correlated sub-queries.
- Create reports of sorted and restricted data.

COURSE OUTLINES

Module 1: Introduction

- Introduction
- Entity Relationship Model
- Practice 1-1: Introduction

Module 2: Retrieving Data Using the SQL SELECT Statement

- Retrieving Data Using the SQL SELECT Statement
- Practice 2-1: Retrieving Data Using the SQL SELECT Statement

Module 3: Restricting and Sorting Data

- Restricting and Sorting Data
- Practice 3-1: Restricting and Sorting Data

Module 4: Using Single-Row Functions to Customize Output

- Using Single-Row Functions to Customize Output
- Number Functions

- Practice 4-1: Using Single-Row Functions to Customize Output

Module 5: Using Conversion Functions and Conditional Expressions

- Using Conversion Functions and Conditional Expressions
- General Functions
- Practice 5-1: Using Conversion Functions and Conditional Expressions

Module 6: Reporting Aggregated Data Using the Group Functions

- Reporting Aggregated Data Using the Group Functions
- Practice 6-1: Reporting Aggregated Data by Using Group Functions

Module 7: Displaying Data from Multiple Tables Using Joins

- Displaying Data from Multiple Tables Using Joins
- Practice 7-1: Displaying Data from Multiple Tables by Using Joins

Module 8: Using Subqueries to Solve Queries

- Using Subqueries to Solve Queries
- Practice 8-1: Using Subqueries to Solve Queries

Module 9: Using Set Operators

- Using Set Operators
- Practice 9-1: Using Set Operators

Module 10: Managing Tables Using DML Statements in Oracle

- Managing Tables Using DML Statements in Oracle
- State of Data
- Practice 10-1: Managing Tables by Using DML Statements
- Practice 10-1: Managing Tables by Using DML Statements.... Cntd

Module 11: Introduction to Data Definition Language in Oracle

- Introduction to Data Definition Language in Oracle
- FOREIGN KEY Constraint
- Practice 11-1: Introduction to Data Definition Language

Module 12: Introduction to Data Dictionary Views

- Introduction to Data Dictionary Views
- Before you Begin Practice 12: Using SQL Developer
- Practice 12-1: Introduction to Data Dictionary Views

Module 13: Creating Sequences, Synonyms, and Indexes

- Creating Sequences, Synonyms, and Indexes
- Sequence Information
- Practice 13-1: Creating Sequences, Synonyms, and Indexes

Module 14: Creating Views

- Creating Views
- Practice 14-1: Creating Views

Module 15: Managing Schema Objects

- Managing Schema Objects
- DROP TABLE
- Practice 15-1: Managing Schema Objects
- Practice 15-1: Managing Schema Objects.... Cntd

Module 16: Retrieving Data by Using Subqueries

- Retrieving Data by Using Subqueries
- Practice 16-1: Retrieving Data by Using Subqueries

Module 17: Manipulating Data by Using Subqueries

- Manipulating Data by Using Subqueries
- Practice 17-1: Manipulating Data by Using Subqueries

Module 18: Controlling User Access

- Controlling User Access
- Practice 18-1: Controlling User Access



Module 19: Manipulating Data Using Advanced Queries

- Manipulating Data Using Advanced Queries
- MERGE Statement
- Practice 19-1: Manipulating Data
- Practice 19-1: Manipulating Data...Cntd

Module 20: Managing Data in Different Time Zones

- Managing Data in Different Time Zones
- Practice 20-1: Managing Data in Different Time Zones

Module 21: Conclusion

- Conclusion
- Q&A Sessions