## Oracle Database 11g: SQL Fundamentals II





Course Duration: 2 days

### Description

This Oracle 11g training textbook will prepare students for the Oracle certification exams (OCP). This textbook can be used for advanced self-study, or for instructor-led training in both in-class or virtual-class environments. Textbooks can also be used for ongoing reference long after the course is completed. In addition to receiving the print copy of this textbook, all students may receive e-Learning modules.

#### **Audience**

The target audience for this training course is all Oracle professionals, both business and systems professionals, who wish to pass the Oracle certification exams and need a "how to" guide to acquire the knowledge of SQL. Further, this course is well suited for non-Oracle professionals already experienced in the SQL but who wish to become acquainted with the unique and advanced features of Oracle SQL. Among the specific groups for whom this course will be helpful are application developers and database administrators.

## Objectives

The primary objective of this training course book is to consider advanced subjects and techniques pertaining to the SQL database language, based upon the latest features available with the Oracle release. Even professionals experienced in other implementations of the industry-standard SQL language will benefit from the advanced and Oracle-specific features of SQL discussed in this course. This enhanced and expanded revision includes many new and expanded conceptual subjects, including:

- Learn to use the SQL99 join syntax and learn about the full range of join operations available, such as natural join, inner join, cross join, outer joins and others.
- Perform advanced SQL queries using techniques such as CASE structures, rollup and cube operations.
- Moving beyond basic table definitions, learn to define the full range of database objects, such as advanced table definitions and the creation of indexes, sequences, views and others.
- Use the powerful set of built-in SQL functions. These functions provide sophisticated manipulation of character, numeric and date data elements.
- Taking advantage of the latest features found within the Oracle release, such as the handling and tolerating DML errors without application interruption, newly added functions, and other topics.
- Obtain database object metadata from the data dictionary.
- Understand basic database security and object privileges.
- Protect database integrity and extend the conceptual data model using declarative constraints.
- Using SQL Developer and other available SQL interfaces.
- Develop complex SQL\*Plus reports and reusable SQL\*Plus scripts, as well as control the SQL\*Plus environment.

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- CROSS JOINS
- NATURAL JOINS
- INNER JOINS
- OUTER JOINS
- ANTI JOINS
- USING NAMED SUBQUERIES

# DATABASE OBJECTS: OTHER OBJECTS

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- ABOUT SEQUENCES
- ALTER SEQUENCE & DROP SEQUENCE
- ALTER SEQUENCE
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- DROP SYNONYM
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## ENHANCING GROUPS WITH ROLLUP & CUBE

USING ROLLUPUSING CUBE

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- USER PASSWORDSOBJECT SECURITY

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- ASCII CODES FUNCTIONS
- PAD & TRIM FUNCTIONS
- STRING MANIPULATION FUNCTIONS
- STRING COMPARISON FUNCTIONS
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- NULL VALUE FUNCTIONS

- RENAMING & DROPPING CONSTRAINTS
- ENABLING & DISABLING CONSTRAINTS
- DEFERRED ENFORCEMENT
- SET CONSTRAINTS
- HANDLING CONSTRAINT EXCEPTIONS
- CONSTRAINTS WITH VIEWS
- DATA DICTIONARY STORAGE

### **SQL FUNCTIONS: DATE**

- DATE FORMAT FUNCTIONS
- DATE ARITHMETIC FUNCTIONS

#### ADVANCED SQL\*PLUS REPORTS

- BREAK
- COMPUTE
- DATABASE OBJECTS: RELATIONAL VIEWS COLUMN
  - TTITLE & BTITLE

- ABOUT DATABASE OBJECTS
- ABOUT RELATIONAL VIEWS
- UPDATING VIEW DATA

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Ctrl+ Click here
to enquire about
this course:

MAINTAINING VIEW DEFINITIONS

ALTER VIEW

DROP VIEW

DATABASE OBJECTS: DATA DICTIONARY STORAGE

ABOUT THE DATA DICTIONARY

• OBJECT-SPECIFIC DICTIONARY VIEWS

• USER UPDATABLE COLUMNS

UNDERSTANDING THE DATA DICTIONARY

**STRUCTURE** 

DATABASE OBJECTS: INDEXES

ABOUT INDEXES

• USE B-TREE INDEXES

OPTIONAL - ADVANCED SQL\*PLUS REPORTS

• REPORT-1

• REPORT-2

• SOLUTIONS

• REPORT-1

• REPORT-2

OPTIONAL - BUILDING SQL\*PLUS SCRIPTS

USING SQL\*PLUS VARIABLES

DEFINE & UNDEFINE

ACCEPT

PROMPT

PAUSE

OPTIONAL - SQL\*PLUS SESSION CONTROL

CONTROLLING SYSTEM VARIABLES

SET

SHOW