Oracle 19c PL/SQL Fundamentals (TTOR12019)

Category: Software Development & Programming | **Vendor:** Trivera Tech

Duration: 24.00 hours (3 days) **19.5 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

Oracle 19c PL/SQL Fundamentals®is a three-day, hands-on technical course that introduces Oracle database programming using the PL/SQL programming language. Throughout the course students will explore the core syntax, structure and features of the language. This course will also lay the foundation for the entire Oracle PL/SQL programming series, allowing one to progress from introductory topics to advanced application design and programming and finally onto writing complex high-performance applications.®

About This Course

Oracle 19c PL/SQL Fundamentals is a three-day, hands-on technical course that introduces Oracle database programming using the PL/SQL programming language. Throughout the course students will explore the core syntax, structure and features of the language. This course will also lay the foundation for the entire Oracle PL/SQL programming series, allowing one to progress from introductory topics to advanced application design and programming and finally onto writing complex high-performance applications. The course also explores applying the newly learned skills to the development of database applications. Participants will learn how to use database-resident stored program units such as procedures, functions, packages and database triggers. Students will also learn about the latest features in Oracle 19c.

Who Should Attend

This course is geared for anyone needing to interface with an Oracle database such as end users, business analysts, application developers and database administrators / DBAs. Attendees should have incoming basic SQL experience, as well as an understanding of databases (required to manipulate it with PL/SQL).

Prerequisites & Entry Requirements

General Prerequisites:

This course is geared for anyone needing to interface with an Oracle database such as end users, business analysts, application developers and database administrators / DBAs. Attendees should have incoming basic SQL experience, as well as an understanding of databases (required to manipulate it with PL/SQL).

Learning Outcomes

Upon successful completion of this course, participants will be able to:

Working within in a hands-on learning environment, guided by our expert team, attendees will develop a practical approach to Oracle Database Technology. Throughout the course participants will explore:
Using PL/SQL programming language for database applications and development
incorporating PL/SQL modules within the application architecture from the initial design and planning phase
The essentials of building executable PL/SQL program units
Each of the major segments of a workin g program and how these interact with each other during program execution,
Important error or exception handling capabilities of the language.
How database-resident program units can be used as part of the overall database application architecture
Applying these new skills to the development of PL/SQL packages.
Advanced database programming capabilities and benefits
How database triggers can be used as part of an advanced database application design

Detailed Course Outline

Selection & Setup of the Database Interface

Considering Available Tools

Selecting the Appropriate Tool

Oracle Net Database Connections

Oracle PAAS Database Connections

Setup SQL Developer

Setup SQL *Plus

Setup JDeveloper

About BIND and Substitution Variables

Using SQL Developer

Using SQL *Plus

Choosing a Database Programming Language

What is Database Programming

PL/SQL Programming

PL/SQL Performance Advantages

Integration with Other Languages

PL/SQL Language Essentials

PL/SQL Program Structure

Language Syntax Rules

Embedding SQL

Writing Readable Code

Generating Readable Code

Generating Database Output

SQL * Plus Input of Program Block

DECLARE Section

About the Declare Section

Declare Primitive Types

Declaration Options

Not Null

Constant

Data Dictionary Integration

% Type

Declare Simple User-Defined Types

Type ¦ Table

Type ¦ Record

Extended User Defined Types

BEGIN Section

About the Begin Section

Manipulating Program Data

Logic Control & Braching

GOTO

LOOP

IF-THEN-ELSE

CASE

EXCEPTION Section

About the Exception Section

Isolating the Specific Exception

Pragma Exception_INIT

SQLCODE &SQLERRM Example

SQL%ROWCOUNT & Select ¦ Into

Beyond the Basics : Explicit Cursors

About Explicit Cursors

Extend Cursor Techniques

For Update of Clause

Where Current of Clause

Using for ¦ Loop Cursors

Introduction Database Resident Programming Units

About Database €œ Resident Programs

Physical Storage & Execution

Types of Stored Program Units

Stored Program Unit Advantages

Modular Design Principles

Creating Stored Procedures and Functions

Stored Procedures & Functions

Create Procedure / Create Function

Creating Procedures & Functions

Raise_Salary() Procedure

Salary_Valid() function

The Parameter Specification

Default Clause

System & Object Privileges

Using the Development Tools

Executing Stored Procedures and Functions

Calling Procedures & Functions

Unit Testing with Execute

Anonymous Block Unit Testing

Specifying a Parameter Notation

SQL Worksheet Unit Testing

Calling Functions from SQL

Maintaining Stored Programming Units

Recompiling Programs

Mass Recompilation Using UTL_RECOMP()

Dropping Procedures & Functions

Drop Procedures & Functions

Drop Procedure / Function

Data Dictionary Metadata

Using USER_OBJECTS

Using USER_SOURCE

Using USER_ERRORS

Using USER_OBJECT_SIZE

Using USER_DEPENDENCIES

Managing Dependencies

Dependency Internals

Tracking Dependencies

The Dependency Tracking Utility

SQL Developer Dependency Info

Dependency Strategy Checklists

Creating & Maintaining

About Packages

Creating Packages

Maintaining Packages

Performance Considerations

Advanced Package Capabilities

Definer & Invoker Rights

White Lists & Accessible By

Persistent Global Objects

Defining Initilization Logic

Object Orientation Support

Advanced Cursor Techniques

Using Cursor Variables

Using SYS_REFCURSOR

Using_Cursor Expressions

Using System Supplied Packages

DBMS_OUTPUT()

UTL_FILE()

FOPEN() Example

Database Trigger Concepts

About Database Triggers

DML Event Trigger Sub-Types

Database Trigger Scenario

Trigger Exhaustion Mechanisms

Trigger within SQL Worksheet

Creating Database Triggers

Statement Level Triggers

Using Raise Application_Error()

Row-Level Triggers

Examples of Triggers

Employee_Salary_Check Example

Employee_Journal Example

Budget_Event Example

Instead of Triggers

Triggers within and Application

Maintaining Database Triggers

Call Syntax

Trigger Maintenance Tasks

Show Errors Trigger

Drop Trigger

Alter Trigger

Multiple Triggers for a Table

Handling Mutating Table Issues

Implementing System Event Triggers

What are System Event Triggers

Defining the Scope

Available System Events

System Event Attributes

Additional Course Details

Nexus Humans Oracle 19c PL/SQL Fundamentals (TTOR12019) training program is a workshop that presents an invigorating mix of sessions, lessons, and masterclasses meticulously crafted to propel your learning expedition forward.

This immersive bootcamp-style experience boasts interactive lectures, hands-on labs, and collaborative hackathons, all strategically designed to fortify fundamental concepts.

Guided by seasoned coaches, each session offers priceless insights and practical skills crucial for honing your expertise. Whether you're stepping into the realm of professional skills or a seasoned professional, this comprehensive course ensures you're equipped with the knowledge and prowess necessary for success.

While we feel this is the best course for the Oracle 19c PL/SQL Fundamentals (TTOR12019) course and one of our Top 10 we encourage you to read the course outline to make sure it is the right content for you.

Additionally, private sessions, closed classes or dedicated events are available both live online and at our training centres in Dublin and London, as well as at your offices anywhere in the UK, Ireland or across EMEA.

Frequently Asked Questions

Q: What delivery options are available for Oracle 19c PL/SQL Fundamentals (TTOR12019)?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: How many CPD hours does this course provide?

The 3-day Oracle 19c PL/SQL Fundamentals (TTOR12019) course provides up to 19.5 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Oracle 19c PL/SQL Fundamentals (TTOR12019) training?

The training takes place over 3 day(s), with each day lasting approximately 24.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Oracle 19c PL/SQL Fundamentals (TTOR12019)?

Yes, we provide corporate training, dedicated training, and closed classes for Oracle 19c PL/SQL Fundamentals (TTOR12019). Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: PL/SQL; Oracle

Q: Why choose Nexus Human for Oracle 19c PL/SQL Fundamentals (TTOR12019)?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Oracle 19c PL/SQL Fundamentals (TTOR12019) training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

Nexus Human

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