

CE131 IBM DB2 SQL Workshop for Experienced Users

Category: AI, Data & Analytics | **Vendor:** IBM

Duration: 24.00 hours (3 days)

19.5 CPD Hours

Rating: ★ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Classroom

Course Overview

This course teaches you how to make use of advanced SQL techniques to access DB2 databases in different environments. This course is appropriate for customers working in all DB2 environments, specifically for z/OS, Linux, UNIX, and Windows.

About This Course

This course teaches you how to make use of advanced SQL techniques to access DB2 databases in different environments. This course is appropriate for customers working in all DB2 environments, specifically for z/OS, Linux, UNIX, and Windows.

Who Should Attend

This intermediate course is for experienced SQL end users, application programmers, database administrators, and user support staff who need more advanced knowledge of SQL.

Learning Outcomes

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

Discuss basic relational database concepts Use some of the OLAP features of DB2, such as GROUPING and RANKING functions Create tables, views and indexes Use referential integrity, check constraints and triggers Use outer joins, and join tables to themselves Use CASE expressions, and the CAST function Identify the impact of Summary Tables, Materialized Query Tables, and temporary tables Use complex subqueries Use a greater number of scalar SQL functions Use advanced SQL constructs, such as recursive SQL and table expressions Define User-Defined Distinct Types and User-Defined Functions Avoid several of the most common causes for poorly-performing SQL

Detailed Course Outline

Introduction

- Identify the purpose of the clauses in the SELECT statement
- Describe the key differences among the IBM DB2 platforms
- Describe and use some of the OLAP features of DB2, such as GROUPING functions like CUBE and ROLLUP, and the RANK, DENSE_RANK and ROW_NUMBER functions

Create Objects

- Code statements to: Create tables and views, Alter tables, Create indexes, Implement referential integrity (RI), and Define triggers and check constraints
- Identify impacts and advantages of referential integrity, including impacts of delete rules
- Identify considerations when using triggers and check constraints
- Define and make use of INSTEAD OF triggers

Join

- Retrieve data from more than one table via inner and outer joins
- Use outer joins (LEFT, RIGHT, FULL)
- Use ANTI JOINS
- Join a table to itself
- Use UNION and UNION ALL
- Use EXCEPT and INTERCEPT

CASE, CAST, Summary Tables, and Materialized Query Tables

- Identify when CASE expressions can be used
- Code CASE expressions in SELECT list and in the WHERE clause
- Identify when CAST specifications can be used
- Identify the advantages of using Summary (Materialized Query) Tables and Temporary tables
- Identify the advantages of using Materialized Query Tables (MQTs) Identify when and how to use Temporary tables

Using Subqueries

- Code subqueries using the ALL, ANY/SOME, and EXISTS keywords
- Code correlated subqueries
- Choose the proper type of subquery to use in each case

Scalar Functions

- Extend your knowledge of scalar functions which: Manipulate arithmetic data, Manipulate date values, and Manipulate character data
- Examples of scalar functions that are addressed in this course: SUBSTR
- POSSTR
- COALESCE/VALUE
- DECIMAL
- ROUND
- DIGITS
- CHAR
- DATE/TIME

Table Expressions and Recursive SQL

- Identify reasons for using table expressions and recursive SQL
- Use nested and common table expressions
- Identify the difference between views and table expressions
- Code recursive SQL
- Control the depth of recursion when coding recursive SQL

UDTs/UDFs and Performance

- Describe the concepts behind User-Defined Types, User-Defined Functions and Stored Procedures
- Predict when queries will use indexes to get better performance
- Identify concepts of predicate processing
- State introductory concepts about index structure
- State general best practices advice

Additional Course Details

Nexus Humans CE131 IBM DB2 SQL Workshop for Experienced Users 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 CE131 IBM DB2 SQL Workshop for Experienced Users 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 CE131 IBM DB2 SQL Workshop for Experienced Users?

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
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Q: How many CPD hours does this course provide?

The 3-day CE131 IBM DB2 SQL Workshop for Experienced Users 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 CE131 IBM DB2 SQL Workshop for Experienced Users 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 CE131 IBM DB2 SQL Workshop for Experienced Users?

Yes, we provide corporate training, dedicated training, and closed classes for CE131 IBM DB2 SQL Workshop for Experienced Users. 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: Why choose Nexus Human for CE131 IBM DB2 SQL Workshop for Experienced Users?

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 CE131 IBM DB2 SQL Workshop for Experienced Users 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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