

Introduction to Writing SQL Queries

(TTSQL003)

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

Introduction to Writing SQL Queries® is a three-day, hands-on course that provides you with the skills and experienced required to use SQL to efficiently organize, retrieve, analyze, and manipulate data to deliver insightful reports, inform strategic decisions, and optimize various aspects of any business. Each module introduces critical concepts and practices, providing you with the knowledge to streamline your data management tasks.

About This Course

A company's success hinges on responsible, accurate database management. Organizations rely on highly available data to complete all sorts of tasks, from creating marketing reports and invoicing customers to setting financial goals. Data professionals like analysts, developers and architects are tasked with creating, optimizing, managing and analyzing data from databases ®® with little room for error. When databases aren't built or maintained correctly, it's easy to mishandle or lose valuable data.

Introduction to Writing SQL Queries is a three-day, hands-on course that provides you with the skills and experienced required to use SQL to efficiently organize, retrieve, analyze, and manipulate data to deliver insightful reports, inform strategic decisions, and optimize various aspects of any business. Each module introduces critical concepts and practices, providing you with the knowledge to streamline your data management tasks.

SQL is the cornerstone of all relational database operations. In this hands-on course, you learn to exploit the full potential of the SELECT statement to write robust queries using the best query method for your application, test your queries, and avoid common errors and pitfalls. Mastering the art of restricting and sorting data enables you to customize your queries, displaying only what's essential and presenting it in a meaningful order. Understanding single-row functions and conversion functions helps optimize data handling by transforming and converting data types as needed. Lastly, by unraveling the mysteries of SQL joins, group functions, and subqueries, you'll acquire the ability to aggregate data, combine data from multiple tables, and conduct complex queries with ease.

You'll leave this course equipped with a firm understanding of SQL and its real-world application, helping you better organize, analyze, and manipulate data in your professional role. You'll be ready to contribute to improving data management processes, enhancing efficiency, and providing actionable insights within your organization. You will be able to streamline data-related tasks, improve data quality, and contribute to data-driven decision-making processes.

NOTE: This course uses SQL Developer. SQL Developer is not the focus of the course, but rather the platform for learning the SQL querying skills. Students are NOT required to have prior experience with SQL Developer. All tools are provided in our easy-access, no-install required, cloud-based environment.

Who Should Attend

This is an introductory- level course appropriate for those who are developing applications using relational databases, or who are using SQL to extract and analyze data from databases and need to use the full power of SQL queries. In order to benefit from the hands-on labs, attendees should have prior experience in scripting or programming languages.

Prerequisites & Entry Requirements

General Prerequisites:

This is an introductory- level course appropriate for those who are developing applications using relational databases, or who are using SQL to extract and analyze data from databases and need to use the full power of SQL queries. In order to benefit from the hands-on labs, attendees should have prior experience in scripting or programming languages.

Learning Outcomes

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

This course combines expert lecture, real-world demonstrations and group discussions with machine-based practical labs and exercises. Working in a hands-on learning environment led by our expert practitioner, you'll learn to:

- Maximize the potential of SQL to build powerful, complex and robust SQL queries
- Query multiple tables with inner joins, outer joins and self joins
- Learn the art of data conversion and manipulation:
- Delve into SQL joins, group functions, and subqueries: Construct recursive common table expressions
- Summarize data using aggregation and grouping
- Execute analytic functions to calculate ranks
- Build simple and correlated subqueries
- Thoroughly test SQL queries to avoid common errors
- Select the most efficient solution to complex SQL problems

Detailed Course Outline

Introduction: Quick Tools Review

Introduction to SQL and its development environments

Using SQL*PLUS

Using SQL Developer

Using the SQL SELECT Statement

Capabilities of the SELECT statement

Arithmetic expressions and NULL values in the SELECT statement

Column aliases

Use of concatenation operator, literal character strings, alternative quote operator, and the DISTINCT keyword

Use of the DESCRIBE command

Restricting and Sorting Data

Limiting the Rows

Rules of precedence for operators in an expression

Substitution Variables

Using the DEFINE and VERIFY command

Single-Row Functions

Describe the differences between single row and multiple row functions

Manipulate strings with character function in the SELECT and WHERE clauses

Manipulate numbers with the ROUND, TRUNC and MOD functions

Perform arithmetic with date data

Manipulate dates with the date functions

Conversion Functions and Expressions

Describe implicit and explicit data type conversion

Use the TO_CHAR, TO_NUMBER, and TO_DATE conversion functions

Nest multiple functions

Apply the NVL, NULLIF, and COALESCE functions to data

Decode/Case Statements

Using the Group Functions and Aggregated Data

Group Functions

Creating Groups of Data

Having Clause

Cube/Rollup Clause

SQL Joins and Join Types

Introduction to JOINS

Types of Joins

Natural join

Self-join

Non equijoins

OUTER join

Using Subqueries

Introduction to Subqueries

Single Row Subqueries

Multiple Row Subqueries

OPTIONAL / TIME-PERMITTING

The following chapters are included in your course materials, and will be covered time-permitting, depending on the skill level and interests of the attendees.

Using the SET Operators

Set Operators

UNION and UNION ALL operator

INTERSECT operator

MINUS operator

Matching the SELECT statements

Using Data Manipulation Language (DML) statements

Data Manipulation Language

Database Transactions

Insert

Update

Delete

Merge

Using Data Definition Language (DDL)

Data Definition Language

Create

Alter

Drop

Data Dictionary Views

Introduction to Data Dictionary

Describe the Data Dictionary Structure

Using the Data Dictionary views

Querying the Data Dictionary Views

Dynamic Performance Views

Additional Course Details

Nexus Humans Introduction to Writing SQL Queries (TTSQL003) 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 Introduction to Writing SQL Queries (TTSQL003) 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 Introduction to Writing SQL Queries (TTSQL003)?

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 Introduction to Writing SQL Queries (TTSQL003) 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 Introduction to Writing SQL Queries (TTSQL003) 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 Introduction to Writing SQL Queries (TTSQL003)?

Yes, we provide corporate training, dedicated training, and closed classes for Introduction to Writing SQL Queries (TTSQL003). 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: SQL Querying

Q: Why choose Nexus Human for Introduction to Writing SQL Queries (TTSQL003)?

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 Introduction to Writing SQL Queries (TTSQL003) 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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