

TMY-DS02: SQL for Data Science

Course Code: TMY-DS02

Duration: 2 days

Instructor-led Training (ILT) | Virtual Instructor-led Training (VILT)

OVERVIEW

SQL for Data Science

SQL (Structured Query Language) is the backbone of data retrieval and manipulation for data scientists. This two-day course is designed for beginners, providing essential skills for working with databases. Participants will learn to write SQL queries to extract, analyze, and manage data, a fundamental skill for anyone in the field of data science.

SKILLS COVERED

By the end of this course, participants will:

- Understand the basics of SQL and its importance in data science.
- Be proficient in writing SQL queries for data retrieval and analysis.
- Gain hands-on experience in working with real-world databases.
- Be able to apply SQL to solve data-related problems.
- Develop the skills to effectively communicate and collaborate on data projects.
- Feel confident to explore more advanced SQL concepts and apply them in their work.

WHO SHOULD ATTEND?

- Beginner level courses for aspiring Data Scientist.
- Anyone who is interested in data science.

PREREQUISITES

There are no prerequisites required to attend this course.

MODULES

Module 1: Introduction to SQL for Data Science

- Introduction to SQL and its role in data science.
- Understanding relational databases and data organization.
- Writing basic SQL queries: SELECT statements.
- Filtering and sorting data with SQL WHERE and ORDER BY.
- Performing data aggregation with GROUP BY.
- Hands-on exercises and practice with real datasets.

Module 2: Advanced SQL Concepts and Data Manipulation

- Joining multiple tables with SQL JOIN operations.
- Subqueries and derived tables for complex queries.
- Introduction to indexing and query optimization.
- Modifying data with SQL: INSERT, UPDATE, DELETE statements.
- Common Table Expressions (CTEs) for complex queries.
- Course wrap-up, Q&A, and next steps in the data science journey

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