
Basic SQL Workshop – 24 Hours

Course description

This course provides a solid foundation in SQL for data analysis and business intelligence. Participants learn how to query, filter, aggregate, and combine data from relational databases using standard SQL syntax. The course focuses on practical data exploration, writing efficient queries, and understanding how SQL is used as a core tool for analysts, BI developers, and data professionals.

Through hands-on exercises, learners progress from simple SELECT statements to joins, subqueries, and data manipulation operations, building the essential skills required for working with real-world databases.

Learning Outcomes

By the end of the course, participants will be able to write SQL queries to retrieve, filter, sort, and aggregate data from relational databases. They will use scalar and aggregate functions, apply conditional logic with CASE statements, combine data using joins and set operators, and build subqueries and derived tables. Participants will also understand basic data manipulation operations (DML) and gain the confidence to explore and analyze data independently using SQL as a primary analytical tool.

Prerequisites

- Basic understanding of data concepts (tables, rows, columns)
- Familiarity with working with data in Excel or reports
- No prior SQL or programming experience is required

Target Audience

- Data Analysts
- BI Analysts and BI Developers
- Junior Data Engineers
- Information Systems and BI Implementers
- Business professionals working with data and reports
- Anyone seeking a solid foundation in SQL

Course Syllabus

Basic SQL Baseline

- Getting to know your Data
- Basic Select
- Where Statement
- Order By
- Scalar Functions
 - Math functions
 - Text functions
 - Date & Time functions
 - Conversion Functions
- Isnull & Coalesce
- Case Statement
 - Simple Case
 - Advanced Case
- Group Functions
- Having
- Join
 - Inner Join
 - Outer Joins
- Union
- Excpt
- Intersect
- Sub Query
- Derived Tables
- DML