

DAT100 : SQL Fundamentals

Code : DAT100 **Duration :** 2 days

Audience :

This course is aimed at a wide audience of system administrators, end users of Office applications and novice programmers without knowledge of databases who wish to learn to access relational databases efficiently using queries in Structured Query Language (SQL).

Prerequisites :

To participate in this course has some familiarity with database systems is desirable.

Realization :

The theory will be treated using presentation slides. Demos are used to illustrate the theory. There is ample opportunity to practice.

Contents :

In the course SQL Fundamentals participants learn the generic SQL ANSI SQL standard. This SQL can be used in a variety of databases, such as Oracle, MySQL, Microsoft Access, Microsoft SQL Server, DB2, Informix, PostgreSQL and other relational databases. This course is designed for people who wish to acquire the skills necessary to retrieve data from a database to analyze and create reports with these data. Participants learn what relational databases are and how we can use them. In particular you will learn the practical skills to write SQL queries like SELECT queries and UPDATE queries. You will also learn what relationships are and how they can be used to capture the structure of the data.

Module 1 : SQL Intro

- What is SQL?
- History of SQL
- SQL Standard
- What are relational databases?
- Database Creation
- DDL Create Table
- Normalisation
- Data Types
- SQL Language Elements
- DML Insert Into
- SQL Errors
- Select Queries

Module 4 : SQL Functions

- Standard Functions
- Finding Functions
- Mathematical Functions
- String Functions
- Conversion Functions
- Date Functions
- Converting Text Dates
- Aggregate Functions
- Formatting Numbers
- Replacing NULL
- Standard WHERE Functions
- CASE for Output Conditions

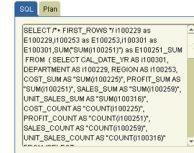
Module 2 : Select Queries

- Query Structure
- SELECT .. FROM
- Options SELECT .. FROM
- SELECT DISTINCT
- WHERE Clause
- Comparison Operators
- Logical AND and OR
- Aggregate Functions
- LIKE Condition
- BETWEEN .. AND Condition
- IN Condition
- IS NULL Condition
- ORDER BY Clause
- GROUP BY Clause
- HAVING Clause
- Query Evaluation Order
- Query Processing

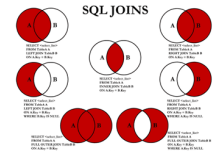
Module 5 : SQL Data Manipulation

- UPDATE Command
- DELETE Command
- DROP Command
- Transactions
- COMMIT
- ROLLBACK
- SAVEPOINT
- Implicit rollbacks
- Implicit commits
- Explicit rollbacks
- Explicit commits

Category :



Databases



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