

Query and modify data with Transact-SQL (DP-080T00)

Duration: 2 days

Audience: Professionnel TI|Analyste de données

Who is this training for?

This course can be valuable for anyone who needs to write basic SQL or Transact-SQL queries. This includes anyone working with data as a data analyst, a data engineer, a data scientist, a database administrator or a database developer. It can also be useful for others peripherally involved with data, or wanting to learn more about working with data such as solution architects, students and technology managers.

Training objectives

By

the end of this course, students will be able to:

- Use SELECT to retrieve columns from a table
- Sort and filtering query results
- Use joins and subqueries to retrieve data from multiple tables
- Use built-in functions, aggregations, and grouping
- Insert, update, and delete data

Summary

This course will teach the basics of Microsoft's dialect of the standard SQL language: Transact-SQL. Topics include both querying and modifying data in relational databases that are hosted in Microsoft SQL Server-based database systems, including: Microsoft SQL Server, Azure SQL Database, Azure Synapse Analytics, and Microsoft Fabric.

Course outline

Learning Path 1: Query and modify data with Transact-SQL

- Module 1: Introduction to Transact-SQL

- Module 2: Sort and filter results in T-SQL
- Module 3: Combine multiple tables with JOINS in T-SQL
- Module 4: Write Subqueries in T-SQL
- Module 5: Use built-in functions and GROUP BY in Transact-SQL
- Module 6: Modify data with T-SQL

Approach and methodology

Practical and structured approach combining focused theory and guided hands-on labs. Participants progressively explore how to query, analyze, and modify data using Transact-SQL through realistic exercises inspired by business and data management scenarios. They learn how to retrieve data from relational databases, combine information from multiple tables, use built-in functions, and perform data modification operations effectively. Led by a Microsoft Certified Trainer (MCT), the training emphasizes interactivity, practical application, and the development of skills that can be directly transferred to working with Microsoft SQL Server–based database solutions in a professional environment.

Prerequisites

Students should have the following knowledge and experience before attending this course:

- Familiarity with working with tables of data, such as those in spreadsheets
- Basic understanding of relational database concepts, including tables, rows, columns, and relationships
- Experience using computer applications in a professional or academic environment
- Fundamental knowledge of data management and analysis concepts
- Interest in learning how to query and modify data using SQL and Transact-SQL
- Basic technical literacy and comfort working with software-based tools and platforms

Recommendations

- Basic knowledge of relational databases Notions of SQL query (SELECT, filtering, joins)
- Understanding of the concepts of tables, relationships and keys
- Ease with a computer environment and data manipulation