



Course Title: DP-080T00-A Query and modify data with Transact-SQL	Course Duration: 2.0 Days
Exam: Not Included	Exam Type: Proctored Exam
Qualification: DP-080 Completion Certificate	

Course Syllabus

1 - Introduction to Transact-SQL

- Work with schemas
- Explore the structure of SQL statements
- Examine the SELECT statement
- Work with data types
- Handle NULLs

2 - Sort and filter results in T-SQL

- Sort your results
- Limit the sorted results
- Page results
- Remove duplicates
- Filter data with predicates

3 - Combine multiple tables with JOINS in T-SQL

- Understand joins concepts and syntax
- Use inner joins
- Use outer joins
- Use cross joins
- Use self joins

4 - Write Subqueries in T-SQL

- Understand subqueries
- Use scalar or multi-valued subqueries
- Use self-contained or correlated subqueries

5 - Use built-in functions and GROUP BY in Transact-SQL

- Categorize built-in functions
- Use scalar functions
- Use ranking and rowset functions
- Use aggregate functions
- Summarize data with GROUP BY
- Filter groups with HAVING



6 - Modify data with T-SQL

- Insert data
- Generate automatic values
- Update data
- Delete data
- Merge data based on multiple tables

Course Overview

This course teaches students how to write queries and modify data using Transact-SQL. It covers fundamental querying concepts, advanced querying techniques, and data modification tasks in SQL Server.

Course Learning Outcomes

By the end of this course, learners will be able to retrieve and filter data using SELECT statements, sort and group results efficiently, use joins, subqueries, and table expressions, modify data with INSERT, UPDATE, and DELETE statements, and implement transactions and error handling in T-SQL to manage data safely and effectively.

Audience

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.

Entry-Level Requirements

Basic understanding of relational databases and fundamental SQL concepts

Recommended Reading

Microsoft Docs: T-SQL Reference

What's Included

- Instructor-led sessions
- lab exercises
- course slides
- practice datasets

Exam Information



This course prepares learners for the Microsoft DP-080: Administering a SQL Database Infrastructure certification exam. The exam tests your ability to manage, query, and modify data in SQL Server using T-SQL, including working with tables, views, indexes, stored procedures, and transactions. Practical experience through labs and exercises in this course directly supports exam readiness. Candidates should expect a combination of multiple-choice, scenario-based, and practical questions. Passing this exam demonstrates proficiency in T-SQL and SQL Server data management and is a key step toward Microsoft Certified: Data Analyst or Database Administrator certification paths.

What's Next

After this course, learners can advance to courses such as Administering Relational Databases (DP-300) or Implementing Data Models and Reports.

Additional Information

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 and, Azure Synapse Analytics.