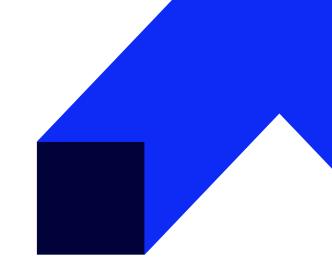# Query and modify data with Transact-SQL

The Query and Modify Data with Transact-SQL training introduces participants to the basics of the Transact-SQL (T-SQL) query language—the SQL dialect used in Microsoft database systems such as SQL Server, Azure SQL Database, and Azure Synapse Analytics.
Participants learn T-SQL syntax and how to create queries, filter, sort, and modify data in relational databases. The course includes both theoretical aspects and practical exercises, enabling participants to understand how to work with data effectively in the Microsoft environment.

Training recipients

The training is intended for individuals who work with data or want to begin learning SQL queries in the Microsoft environment.
It is particularly dedicated to:

- data analysts who want to write queries and process data in SQL databases,
- data engineers and data scientists who need SQL fundamentals for analysis and exploration,
- database administrators and developers,
- solutions architects and IT consultants,
- students and individuals starting a career in analytics or database technologies.

Benefits

- Fundamentals of the Transact-SQL language – you will learn the principles of the SQL dialect developed by Microsoft and how to work with its syntax.
- Creating database queries – you will learn how to use the SELECT statement to retrieve data from one or multiple tables.
- Filtering and sorting results – you will learn how to use the WHERE and ORDER BY clauses and other

tools for precise data analysis.

- Using built-in functions – you will master scalar and aggregate functions for processing and grouping data.
- Modifying data – you will learn how to use the INSERT, UPDATE, DELETE, and MERGE commands to manage data in tables.

Training program

- Introduction to Transact-SQL
- Using SELECT instruction
2. Sorting and filtering query results
- Sorting query results
- Data filtering
3. The use of connections and subqueries
- The use of JOIN operation
- Using subqueries
4. The use of embedded functions
- First steps with scalar functions
- Grouping aggregated results
5. Data modification
- Placing data in tables
- Modifying and deleting data

Expected preparation of the participant

To make your work more convenient and training more effective, we suggest using an additional screen. Lack of such screen does not exclude participation in the training; however, it significantly influences working comfort during classes.

You can find information and requirements of participation in Distance Learning trainings at: https://www.altkomakademia.pl/distance-learning/#FAQ

Training Includes

- https://learn.microsoft.com/pl-pl/training/
- access to Altkom Akademia student

Training method:

- theory
- demos
- individual laboratories
- 50% theory
- 50% practice

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Language

- **Training**: English
- **Materials**: English