

# DP-080: Querying Data with Microsoft Transact-SQL

Microsoft - Data & Al

Live Training (também disponível em presencial)

Localidade: PortoData: 20 Nov 2023

• Preço: 970 € (Os valores apresentados não incluem IVA. Oferta de IVA a particulares e estudantes.)

• Horário: Laboral das 09h00 - 17h00

Nível: EntradaDuração: 14h

### Sobre o curso

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.

## Destinatários

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.

# **Objetivos**

- Introduce relational databases, the SQL language and Transact-SQL
- Sort and filter query results
- Explore T-SQL queries accessing data from multiple tables with various kinds of JOIN operations

- Use subqueries to combine multiple SELECT statements and compose nested queries
- Use functions in Transact-SQL, and how to group aggregated results
- Use Transact-SQL to insert, update, and delete data in a database

## Programa

- Introduction to Transact-SQL
- · Sort and filter results in T-SQL
- Combine multiple tables with JOINs in T-SQL
- Write Subqueries in T-SQL
- · Use built-in functions and GROUP BY in Transact-SQL
- Modify data with T-SQL

#### Introduction to Transact-SQL

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

#### Sort and filter results in T-SQL

- · Sort your results
- Limit the sorted results
- Page results
- · Remove duplicates
- Filter data with predicates
- Exercise Sort and filter query results
- Knowledge check

#### 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

- Exercise Query multiple tables with joins
- Knowledge check

#### Write Subqueries in T-SQL

- Understand subqueries
- Use scalar or multi-valued subqueries
- Use self-contained or correlated subqueries
- Exercise Use subqueries
- Knowledge check

### 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
- Exercise Use built-in functions
- Knowledge check

#### Modify data with T-SQL

- Insert data
- · Generate automatic values
- Update data
- Delete data
- Merge data based on multiple tables
- Exercise Modify data
- Knowledge check