

# Querying Data with Microsoft Transact-SQL Training (DP-080)

### Module 1: Introduction to Transact-SQL

This module provides an introduction to relational databases, the SQL language and Transact-SQL. You'll learn what kinds of statements make up the SQL language and look at the SELECT statement in detail. After completing this module, you'll be able to:

- Understand what SQL is for
- · Identify database objects in schemas
- Identify SQL statement types
- Use the SELECT statement
- Work with data types
- Handle NULLs

#### Module 2: Sort and filter results in T-SQL

Learn how to sort and filter query results. After completing this module, you will be able to:

- Sort your results
- · Limit the sorted results
- Return paged results
- · Remove duplicates
- · Filter data with predicates

# Module 3: Combine multiple tables with JOINs in T-SQL

Explore T-SQL queries accessing data from multiple tables with various kinds of JOIN operations. After completing this module, you will be able to:

- Describe join concepts and syntax
- · Write queries that use inner and outer joins
- Write queries that use cross joins
- Write queries that use self joins



# Module 4: Write Subqueries in T-SQL

Learn how to use subqueries to combine multiple SELECT statements and compose nested queries. After completing this module, you will be able to:

- · Understand what subqueries are
- Use scalar or multi-valued subqueries
- Use self-contained or correlated subqueries

#### Module 5: Use built-in functions and GROUP BY in Transact-SQL

Learn how to use functions in Transact-SQL, and how to group aggregated results. After completing this module, you will be able to:

- Categorise built-in functions
- Use scalar functions
- Use ranking and rowset functions
- · Use aggregate functions
- · Summarise data with GROUP BY
- · Filter groups with HAVING

## **Module 6: Modify data with T-SQL**

Learn how to use Transact-SQL to insert, update, and delete data in a database. After completing this module, you will be able to:

- · Insert data into a table
- · Generate automatic values
- Update data in a table
- · Delete data from a table
- Merge data based on multiple tables

