
DBM049 : Writing T-SQL for Query and Analyze Data**หลักการและเหตุผล :**

This course provides the knowledge and skills to write query on relational database such as SQL Server, MySQL, Oracle etc. The course focuses on teaching individuals how to use programming T-SQL on relational database.

วัตถุประสงค์ :

- Describe T-SQL, sets, and predicate logic.
- Write a single table SELECT statement.
- Write a multi-table SELECT statement.
- Write SELECT statements with filtering and sorting.
- Describe how to use data types.
- Write DML to modify data
- Write queries that use built-in functions.
- Write queries that aggregate data.
- Write subqueries.
- Create and implement views and table-valued functions.
- Use set operators to combine query results.
- Write queries that use window ranking, offset, and aggregate functions.
- Create and implement stored procedures.

หลักสูตรนี้เหมาะสำหรับ :

The primary audience for this course is individuals who write query with T-SQL on relational database.

ความรู้พื้นฐาน :

- Working knowledge of relational databases.

เนื้อหาการอบรม :**Module 1: Introduction to T-SQL Querying**

- Introducing T-SQL
- Understanding Sets
- Understanding Predicate Logic
- Understanding the Logical Order of Operations in SELECT statements

Module 2: Writing SELECT Queries

- Writing Simple SELECT Statements
- Eliminating Duplicates with DISTINCT
- Using Column and Table Aliases
- Writing Simple CASE Expressions

Module 3: Querying Multiple Tables

- Understanding Joins
- Querying with Inner Joins
- Querying with Outer Joins
- Querying with Cross Joins and Self Joins

Module 4: Sorting and Filtering Data

- Sorting Data
- Filtering Data with Predicates
- Filtering Data with TOP and OFFSET-FETCH
- Working with Unknown Values

Module 5: Working with Data Types

- Introducing SQL Server Data Types
- About Data Types
- Working with Numeric Data
- Working with Character Data
- Working with Date and Time Data

Module6: Using DML to Modify Data

- Adding Data to Table
- Modifying and Removing Data

Module7: Using Built-In Functions

- Writing Queries with Built-In Functions
- Using Conversion Functions
- Using Logical Functions
- Using Functions to Work with NULL

Module8: Grouping and Aggregating Data

- Using Aggregate Functions
- Using the GROUP BY Clause
- Filtering Groups with HAVING

Module9: Using Subqueries

- Writing Self-Contained Subqueries
- Writing Correlated Subqueries
- Using the EXISTS Predicate with Subqueries

Module10: Using Table Expressions

- Using Views
- Using Inline Table-Valued Functions
- Using Derived Tables
- Using Common Table Expressions

Module11: Using Set Operators

- Writing Queries with the UNION operator
- Using EXCEPT and INTERSECT
- Using APPLY

Module12: Using Windows Ranking, Offset, and Aggregate Functions

- Creating Windows with OVER
 - SQL Windowing
 - Windowing Components
 - Using OVER
 - Partitioning Windows
 - Ordering and Framing

- Exploring Window Functions
 - Defining Window Functions
 - Window Aggregate Functions
 - Window Ranking Functions
 - Window Distribution Functions
 - Window Offset Functions

Module13: Pivoting and Grouping Sets

- Writing Queries with PIVOT and UNPIVOT
- Working with Grouping Sets

Module14: Executing Stored Procedures

- Querying Data with Stored Procedures
- Passing Parameters to Stored procedures
- Working with Dynamic SQL

วิทยากร :



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- NCS L.3, CompTIA Security+, ITIL Foundation v.3, CCNA
- MCT, MCITP Enterprise, MCSE +Security +Messaging

จำนวนชั่วโมงในการฝึกอบรม : 5 วัน (30 ชั่วโมง)

ช่วงเวลาฝึกอบรม : 9.00 - 16.00 น.

สถานที่ฝึกอบรม :

สถาบันวิทยากร สวทช.

เลขที่ 73/1 อาคารสำนักงานพัฒนาวิทยาศาสตร์และเทคโนโลยีแห่งชาติ (สวทช.)

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วิธีการสำรองที่นั่ง :

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