SQL Fundamentals of Querying (SQL-QueryFund-FLEX)

Modality: Virtual Classroom

Duration: 4 Days (2 hrs/day)

About this course:

Many organizations use databases to store their most critical information: the information that manages their day-to-day operations. After the data is stored in databases, however, it is useless unless you can retrieve it for further business analysis. One example of a database management system is Microsoft SQL Server 2012. The language you use to retrieve information from SQL Server 2012 databases is the Structured Query Language (SQL). This course, SQL Querying: Fundamentals, will teach you to use SQL as a tool to retrieve the information you need from databases.

The average salary for SQL Database Administrator is **$77,428** per year.

Course Objectives:

After completing this course, students will be able to:

- Connect to the SQL Server database and execute a simple query.
- Include a search condition in a simple query.
- Use various functions to perform calculations on data.
- Organize the data obtained from a query before it is displayed on-screen.
- Retrieve data from multiple tables.
- Export the results of a query.

Audience:

This course is intended for:

- Individuals with basic computer skills, familiar with concepts related to database structure and terminology, and who want to use SQL to query databases.

Prerequisites:

- Basic end-user computer skills and some familiarity with database terminology and structure are required.

Course Outline:

Lesson 1: Executing a Simple Query

- Connect to the Database

- Query the Database
- Save a Query
- Modify a Query
- Execute a Saved Query

Lesson 2: Performing a Conditional Search

- Search Using a Simple Condition
- Compare Column Values
- Search Using Multiple Conditions
- Search for a Range of Values and Null Values
- Retrieve Data Based on Patterns

Lesson 3: Working with Functions

- Perform Date Calculations
- Calculate Data Using Aggregate Functions
- Manipulate String Values

Lesson 4: Organizing Data

- Sort Data
- Rank Data
- Group Data
- Filter Grouped Data
- Summarize Grouped Data
- Use PIVOT and UNPIVOT Operators

Lesson 5: Retrieving Data from Tables

- Combine Results of Two Queries
- Compare the Results of Two Queries
- Retrieve Data by Joining Tables

Lesson 6: Presenting Query Results

- Save the Query Result
- Generate an XML Report