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| Aspire T-SQL and Performance Tuning Training | | |
| Day | Morning | Afternoon |
| Monday | Writing a SELECT Statement   * Introduction and setup * What are columns and records? * Structure of a SELECT statement * Structure of object names * Concatenation and Aliases * Sorting and Filtering records | Choosing the right Data Type   * What are Data Types? * Where are Data Types used? * Working with Integers * Working with Characters * Working with Dates and Times |
| Tuesday | Working with Multiple Tables   * Selecting from Multiple Tables * Finding Table Relationships * Parent vs Child Tables * Inner Joins * Outer Joins | Clustered and Non-Clustered Indexes   * How is data stored? * Heaps vs Clustered Indexes * Non-Clustered Indexes * Included Columns |
| Wednesday | Working with Functions   * What is a Function? * Character string functions * Date and Time functions * Aggregate Functions * Logical Query Processing * Grouping Results * Filtering Grouped Results | Reading Execution Plans   * How Queries are Processed. * What is an Execution Plan? * Execution Plan Table Operators * Execution Plan Join Operators * Cardinality Estimator and Statistics |
| Thursday | Data Manipulation Language   * SQL Statement Categories * What is DML? * Inserting Records into a table * IDENTITY and SEQUENCES * Updating Records in a table * Deleting Records in a table * DELETE vs DROP vs TRUNCATE. | Inside Transactions   * What are Transactions? * Auto-Commit vs Explicit Transactions * ACID Properties of a Transaction * How Data is modified in a Transaction * Working with Transactions * What are Locks? |
| Friday | Creating and Modifying SQL Objects   * Scalar Functions * Views and User-Defined Functions * Derived Tables and CTE’s * Stored Procedure | Open Question Time. |