T-SQL Programming

This course contains basics of SQL Server and T-SQL Programming.

Mode: Classroom
Duration: 40hours
Technology - Microsoft SQL Server 2008
Level –Beginner
Prerequisite– NA

Course Outline:-

Introduction to Microsoft SQL server

- Introductions
- Sql server 2008 editions
- Sql server 2008 requirements
- Downloading sql software
- Selecting installation options
- Installing a named instance
- Sql server installation center overview
- Lunching SQL server management studio

Management Studio

- Introduction
- Working with queries

Keys and Constraints

- Introduction
- Primary Keys
- Foreign Keys and Composite Keys
- Understanding Constraints

Data Definition Language (DDL)

- Creation of table
- Modifying the structure of a table
- Dropping a table
- Working with different options

Data Manipulation Language (DML)

- Inserting, updating & deleting operations
- Operators, Built-in functions, grouping

Basic Queries

- Introduction
- SELECT...FROM
- WHERE
- GROUP BY
- ORDER BY

Special Condition in Query

- Introduction
- Operators
- Combining Conditions
- IN
- LIKE
- BETWEEN
- UNION
- EXCEPT and INTERSECT

Working with Functions

- Using Operators
- ISNULL and COALESCE
- Using Functions

Joins

- Introduction to Joins
- Inner join
- Outer join
- Cross joins
- Unions

Working with Indexes

- Introduction to indexes
- Clustered & non clustered indexes
- Creating, dropping indexes
- Index Maintenance Concepts

Triggers

- Introduction to Triggers
- DML Triggers
- DDL Triggers

Introduction to T-SQL Programming

- Variables
- IF-ELSE
- WHILE

- ERROR Handling

Using T-SQL Logic

- Tables
- Views
- User-Defined Functions
- Stored Procedures
- Triggers
- Database Cleanup

Other Types of Data

- XML Data
- MAX Data
- Spatial Data Type
- NEW DATE and TIME

Using Complex Queries

- CTE Queries
- Ranking Functions
- MERGE
- Output Clause

Linked Server

- Introduction
- Creating Login
- Using Query in Linked Server

Database Snapshot

- Snapshot Basics

SQL Server Performance

- System Monitor
- Profiler