**SQL Server**

**Introduction To SQL Server**

* Understanding Data & Information
* Database
* DBMS
* RDBMS
* DB Design
* Types of Databases
* Client Server Architecture
* SQL Server versions
* SQL Server Management Studio
* Creating DB
* Sub Languages of TSQL
  + DDL
  + DML
  + TCL
  + DCL
  + DQL
* Creating Tables
* Insert,Delete,Update Data into Tables
* **Normalization**
* **Constraints**
* Unique
* Not Null
* Primary key
* Check
* Default
* Foreign Key
* **Working With Single Table Queries**
* Writing Queries using SELECT Statement
* Understanding Query Flow
* Operators in SQL Server
* Clauses in SQL Server
* Filtering Data Using WHERE Clause
* Sorting Data using ORDER BY Clause
* Avoid Duplicates using DISTINCT Clause
* Using Top Clause
* **DML Commands**
* Copying Data From one Table to Another
* Insert command
* Update Command
* Delete Command
* **DDL Commands**
* Create command
* Alter Command
* Drop Command
* Truncate Command
* Delete vs Truncate
* **Built in Functions**
* Scalar Functions

. String

.Date

.Mathematical

.Conversion

.Coalesce

.Rank and Dense Rank

.EOMONTH

.DateFromParts

.ISNULL

.IIF

.Row Number

.Running Total

* Group Functions
* Aggregate Functions

.Cunt(\*)

.MAX()

.MIN()

.AVG()

.SUM()

* Deterministic Functions
* Non-Deterministic Functions
* SET Operators
* **Sub Queries**
* Importance of Sub Query
* Types of Sub Queries
* Nested Queries
* **JOINS**
* Importance of Joins
* Types of Joins
* Inner Join or Equi Join
* Outer Join
* Left Outer Join
* Right Outer Join
* Full Outer Join
* Self Join
* Cross Join
* Advanced Joins
* **Database Transactions**
* Transactions Using Commit & Rollback
* ACID Properties
* Working with Locks
* Viewing Dead Locks
* **Database Security**
* Understanding Privileges
* Types of Privileges
* Granting & Revoking Privileges
* **Temporary Tables**
* Local Temp Tables
* Global Temp Tables
* **Views**
* Importance of Views
* Types of views
* **Indexes**
* Clustered & Non Clustered
* **Stored Procedures**
* **Triggers**
* **Cursors**
* **Schemas**
* **Backup & Restore**
* **SQL Server Agent**
* **Advanced Topics in SQL Server**