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| **SQL SERVER COURSE CONTENTS** |

# SQL SERVER

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| **SQL SERVER** |
| **Introducing SQL Server**   * What is SQL Server * Architecture of SQL Server * SQL Server Editions * Installing SQL Server * Sql Server Instances * Internals of Sql Server Database * MDF & LDF Files |
| **Basics of Database Design**   * Normalization * Denormalization * Introducing SQL Server Management Studio * Creating a Database * Data Types * Designing Table Model * Creating Tables * Alteration of Table Design * Drop Table |
| **Writing Queries**   * INSERT queries * UPDATE queries * DELETE queries * TRUNCATE * The SELECT Clause * The FROM Clause * The WHERE Clause * Mathematical Operator * Conditional Operators * AND , OR Operators * Like Operators * The ORDER BY Clause * Aggregate Functions * String Functions * Date Functions * Using GROUP BY and HAVING * Using TOP N and TOP N PERCENT |
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| **Relational Database**   * Introduction to RDBMS * Why Relational Model * Advantages of Relational Model * Master Table & Child Tables * Introduction to Foreign Key * Creating Relations between tables |
| **JOINS IN SQL SERVER**   * Introduction to Joins * Types of Joins * Inner Join * Left Outer Join * Right Outer Join * Full Outer Join * Self-Join * Writing Joins queries * APPLYING CLAUSES USING JOINS |
| **Advanced SQL QUERIES**   * OFFSET & FETCH * SELECT INTO queries * SUB-QUERIES * UNION * INTERSECT * EXCEPT * ROW\_NUMBER * RANK * CUBE & ROLLUP |
| **T-SQL**   * What is T-SQL? * Syntax Conventions * Executing SQL Statements * Identifiers * Operators * Variables * Using T-SQL to Build and Alter Objects * If – else statements * Case statements * Looping statements * Identity statements   **Stored Procedures, Functions**   * Introduction to Stored Procedures * Writing Stored Procedures * Alteration of Processing * Using/Calling Procedures * Using Input & Output Parameters * Advantage of Stored Procedures * Introduction to Functions * Writing Functions * Types of functions * Scalar Functions * Table Value Functions * Comparison between Stored Procedures & Functions |
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| **Indexes**   * Introduction to Indexes * Types of Indexes * Creating Indexes * Best Practices of Indexes Creation   **Cursors**   * Introduction to Cursors * Types of Cursors * Creating Cursors |
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