

# Introduction to SQL Server

- SQL Server is software (A Relational Database Management System) developed by Microsoft. It is also called MS SQL Server. It is implemented from the specification of RDBMS.
- What is SQL Server
- The relational database management system(RDBMS) is a Microsoft software product mainly used to store and retrieve data for the same or other applications. We can run these applications on the same computer or a different one.

- Microsoft developed and marketed the SQL Server relational database management system(RDBMS) to primarily compete with the MySQL and Oracle databases. It is also called MS SQL Server, which is an ORDBMS, platform-dependent, and can work on GUI and command-based software.
- The key interface tool for SQL Server is SQL Server Management Studio(SSMS), which operates in both 32-bit and 64-bit environments.

# Usage of SQL Server

- Its main purpose is to build and maintain databases.
- It is used to analyze the data using SQL Server Analysis Services(SSAS).
- It is used to generate reports using SQL Server Reporting Services(SSRS).
- It is used to perform ETL operations using SQL Server Integration Services(SSIS).

# How to connect to the SQL Server using SQL Server Management Studio

Connect to Server

Microsoft SQL Server 2014

Server type: Database Engine

Server name: LAPTOP-2HN3PT8T\SQLEXPRESS

Authentication: Windows Authentication

User name: LAPTOP-2HN3PT8T\Pranaya

Password:

☐ Remember password

Connect Cancel Help Options >>

- Step 1: Select Server Type
- As we are going to connect with the SQL Server Database, so here we need to select the Server Type as Database Engine.
- Along with Database Engine, the other Server Types options are available as SQL Server Analysis Services(SSAS), SQL Server Reporting Services (SSRS) and SQL Server Integration Services (SSIS).
- These there are called MSBI(Microsoft Business Intelligence)

# Database Engine:

- The Database engine is the core service of SQL Server which will use for storing a large amount of data, accessing the data, manipulating the data and providing security to the information.
- In Database engine, the data will be stored in the form of a 2-D format(Tables).

## Analysis Services(SSAS):

- The SSAS(SQL Server Analysis Service) is a tool that is used under the data warehousing/data mining environment for storing the information in the form of a 3-D format.

# Reporting Services(SSRS):

- SQL Server Reporting Service(SSRS) is a tool that is used to generate various reports such as MS-word file format, Ms-Excel format, .pdf format, XML format, .tiff file format etc.

## Integration Services(SSIS):

- The SQL Server integration Service (SSIS) is a tool that is used to convert one database tables into another database understandable format. For example, SQL Server database tables are converting into Oracle understandable table format.