Connecting to SQL Server using SSMS - Part 1

SQL Server Management Studio (SSMS), is the client tool that can be used to write and execute SQL queries. To connect to the SQL Server Management Studio
1. Click Start
2. Select All Programs
3. Select Microsoft SQL Server 2005, 2008, or 2008 R2 (Depending on the version installed)
4. Select SQL Server Management Studio
You will now see, Connect to Server window.
1. Select Database Engine as the Server Type. The other options that you will see here are Analysis Services(SSAS), Reporting Services (SSRS) and Integration Services(SSIS).
Server type = Database Engine

2. Next you need to specify the Server Name. Here we can specify the name or the server or IP Address.If you have SQL Server installed on your local machine, you can specify, (local) or just .(Period) or 127.0.0.1(loop back ip address)
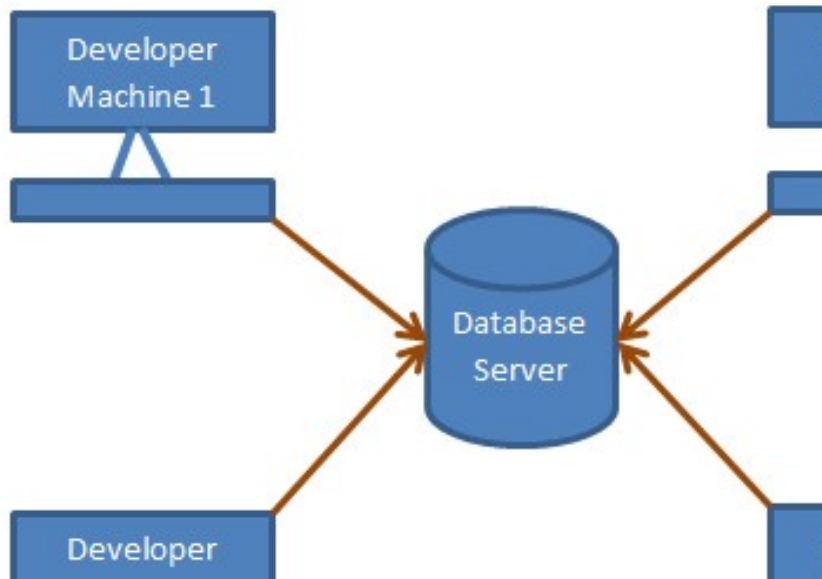**Server name = (local)**

3. Now select Authentication. The options available here, depends on how you have installed SQL Server. During installation, if you have chosen **mixed mode authentication**, you will have both Windows Authentication and SQL Server Authentication. Otherwise, you will just be able to connect using windows authentication.

4. If you have chosen Windows Authentication, you dont have to enter user name and password, otherwise enter the user name and password and click connect.

You should now be connected to SQL Server. Now, click on **New Query**, on the top left hand corner of SSMS. This should open a new query editor window, where we can type sql queries and execute.

SSMS is a client tool and not the Server by itself. Usually database server (SQL Server), will be on a dedicated machine, and developers connect to the server using SSMS from their respective local (development) computers.

Developer Machines 1,2,3 and 4 connects to the database server using SSMS.

Creating, altering and dropping a database - Part 2
In Part 1 of SQL Server, we have seen, using SSMS to connect to SQL Server. In this part we will learn creating, altering and dropping a database.

A SQL Server database can be created, altered and dropped
1. Graphically using SQL Server Management Studio (SSMS) or
2. Using a Query
To create the database graphically
1. Right Click on Databases folder in the Object explorer
2. Select New Database
3. In the New Database dialog box, enter the Database name and click OK.

view → object exploer

To Create the database using a query
Create database DatabaseName

Whether, you create a database graphically using the designer or, using a query, the following 2 files gets generated.

Databasename→ right click -> properties → path -> select and go →

.MDF file - Data File (Contains actual data)
.LDF file - Transaction Log file (Used to recover the database)

To alter a database, once it's created (RENAME)
Alter database DatabaseName Modify Name = NewDatabaseName

Alternatively, you can also use system stored procedure(RENAME)
Execute

sp_renameDB 'OldDatabaseName','NewDatabaseName'

To Delete or Drop a database
Drop Database DatabaseThatYouWantToDrop

Dropping a database, deletes the LDF and MDF files.

You cannot drop a database, if it is currently in use. You get an error stating - Cannot drop database "NewDatabaseName" because it is currently in use. So, if other users are connected, you need to put the database in single user mode and then drop the database.
Alter Database DatabaseName Set SINGLE_USER With Rollback Immediate

With Rollback Immediate option, will rollback all incomplete transactions and closes the connection to the database.

*** SYSTEM DATABASE CANT BE DROPED

Creating and working with tables - Part 3

The aim of this article is to create tblPerson and tblGender tables and establish primary key and foreign key constraints. In SQL Server, tables can be created graphically using SQL Server Management Studio (SSMS) or using a query.

To create tblPerson table, graphically, using SQL Server Management Studio
1. Right click on Tables folder in Object explorer window
2. Select New Table
3. Fill Column Name, Data Type and Allow Nulls, as shown below and save the table as tblPerson.