

Write the following code:

Using System.Data.SqlClient;

```
Private void btnConnect_Click(object sender, EventArgs e)
{
    string sqlConnectionString = "server = SA1-BHANU\SQLServer;
                                    User Id = Sa; password = abc@123;
                                    database = EmployeeDB";
    SqlConnection con = new SqlConnection(sqlConnectionString);
    con.Open();
    if (con.State == ConnectionState.Open)
        MessageBox.Show("Connection is successful");
    Connection String:
    Server = Server Name; user Id = UserName; password = user
    Password; Database = database Name;
```

## Performing Operations on data base objects:-

\* To perform any kind of operations on database object we use command object.

\* by using command object, we can perform all the operations of database like DDL, DML and select operations.

## Properties with Command object

1. CommandText

2. Command Time out

3. CommandType

4. Connection

5. Parameters

Text (default)

StoredProcedure

Table Direct

### 1. Command Text:-

→ This property is used to set or get the required Command Text Value, Command Text can be an Sql Query or stored procedure Name or Table Name.

### 2. Command Time Out:-

→ used to set or Get the required Time out Period that Command object should Wait to Get a response from the server after sending request to server. default Time out period is 30 sec. Within this Time period if Command object does not get Any response then it raises Command Timeout Error.

### 3. Command Type:-

→ Used To Set or Get required command Type Value and command Type will depend within the Value Given in Command Text property like.

\* If in Command Text Query is Supplied then Command Type is Text.

\* If in Command Text stored procedure Name is Supplied then Command Type is stored procedure.

\* If in Command Text Table Name is Supplied then Command Type is Table direct.

#### 4. Connection:-

→ Used to set or get required connection object name using which command object request should be sent to the database server.

#### 5. Parameters:-

→ Used to set or get required parameters and their values, that are required to send to database.

\* Parameters is a collection property.

#### Primary Key:-

Unique and not Null.

\* minimal set of Super Key is called as primary key.

\* A Super Key is combination of one OR More fields

of a table used to identify a Record uniquely.

\* features of primary key unique and not Null.

\* A Table can have maximum of one primary key only.

\* A Table can have Any Number of super keys only.

## Methods With Command Object

1. Execute non Query ()

2. Execute Reader ()

3. Execute scalar ()

S.NO.	Execute non Query	Execute Reader	Execute Scalar
1.	Will Work With Action Queries only	Will Work With Action And non-Action Queries	Will Work With Action And non-Action Queries that Contains Aggregate functions.

<u>Sno</u>	<u>Execute NonQuery</u>	<u>Execute Reader</u>	<u>Execute Scalar</u>
01	Will Work with Action Queries only	Will Work with Action and Non-Action Queries	Will Work with Action and Non-Queries that Contains Aggregate Functions
02	Return Type is <u>int</u>	Return Type is <u>DataReader</u>	Return Type is <u>Object</u>
03	Returns the Count of Rows affected by the Query	Returns the address of Rows Selected by the Query	Returns the First Row and First Column Value of the Query
04	Return Value is Optional and Can be assigned to an Integer Variable	Return Value is Mandatory and Should be assigned to the DataReader Object	Return Value is Mandatory and Should be assigned to a Variable of Required Type

## Step1: Declare Command Object

**Syntax: `ClassName ObjectName;`**

## Example: SqlCommand Cmd;

## Step2 : Create Object to the Command Class

Syntax: `ObjectName = new ClassName(String Command Text, Connection);`

**Example:** Cmd=new SqlCommand("Delete EmpDetails Where Empld=115,Con);

### Step3 : Set the Command Type

Syntax: CommandObjectName.CommandType=CommandType.Value;

**Example:** Cmd.CommandType= CommandType.Text;

## Step4 : Execute the Command Object

**Syntax:** CommandObjectName.Exe~~x~~utionMethod();

**Example: Cmd.ExecuteNonQuery();**



Steps to Work with Command Object:

Step 1: declare command object

Syntax: Class Name Object Name;

Example: SQL Command cmd;

Step 2: Create object to the Command class

Syntax: Object Name = New Class Name (String CommandText, Connection);

Example: Cmd = New SQL Command ("Delete Emp Details Where Emp Id = 115, Con");

Step 3: Set the Command Type

Syntax: Command Object Name . Command Type = Command Type Value;

Example: Cmd . Command Type = Command Type . Text;

Step 4: Execute the Command object

Syntax: Command Object Name . Execution Method();

Example: Cmd . Execute Non Query();

Table Name: Emp Details

Columns: Emp Id (PK, int, Not Null)

EName (Varchar(20), not Null)

Designation (Varchar(20), Null)

DOJ (Date, Null)

Salary (Money, Null)

Dept No (FK, int, Null)

Table Name: Dept Details

Columns: Dept No, DName, Location (Varchar(20), Null)

Example, to delete a Record, from Emp. details table.



Code:

```
using System.Data.SqlClient;  
private void btnDelete_Click(object sender, EventArgs e)  
{  
    string sqlConnectionString = "Server = *; User Id = SA;  
    Password = *; database = employeeDB;  
    SqlConnection con = new SqlConnection(sqlConnectionString);  
    con.Open();  
    // Step 1  
    SqlCommand cmd;  
    // Step 2  
    cmd = new SqlCommand("delete Emp Details Where EmpId  
    = 108", con);  
    // Step 3  
    cmd.CommandType = CommandType.Text;  
    // Step 4  
    int Rows = cmd.ExecuteNonQuery();  
    con.Close();  
    MessageBox.Show(Rows + " Record(s) deleted");  
}
```

Example to delete a record of user choice

Enter EmpId

Code:

```
using System.Data.SqlClient;  
private void btnDelete_Click(object sender, EventArgs e)  
{  
    string strConn = "Data Source=...";  
    Con.Open();  
    SqlCommand cmd;  
    string query = "Delete EmpDetails Where EmpId=" +  
        txtEmpId.Text;  
    cmd = new SqlCommand(query, Con);  
    cmd.CommandType = CommandType.Text;  
    int Rows = cmd.ExecuteNonQuery();  
    Con.Close();  
    MessageBox.Show(Rows + " Record(s) Deleted");  
}
```

Note: Delete Emp details Where EmpId = 108

```
string query = "Delete EmpDetails Where EmpId=" +  
    txtEmpId.Text;
```

```
10 using System.Data.SqlClient;
11
12 namespace WADatabaseExamples
13 {
14     public partial class Form3 : Form
15     {
16         public Form3()
17         {
18             InitializeComponent();
19         }
20
21         private void btnDelete_Click(object sender, EventArgs e)
22         {
23             string SqlConString = "Server=SAI-BANNU\\SQLSERVER;User
24             SqlConnection Con = new SqlConnection(SqlConString);
```

```
19 }  
20  
21 private void btnDelete_Click(object sender, EventArgs e)  
22 {  
23     string SqlConString = "Server=SAI-BANNU\\SQLSERVER;User Id=sa;P  
24     SqlConnection Con = new SqlConnection(SqlConString);  
25     Con.Open();  
26     SqlCommand Cmd;  
27     string Query = "Delete EmpDetails Where EmpId=" + txtEmpId.Text  
28     Cmd = new SqlCommand(Query, Con);  
29     Cmd.CommandType = CommandType.Text;  
30     int Rows = Cmd.ExecuteNonQuery();  
31     Con.Close();  
32     MessageBox.Show(Rows + " Record(s) Deleted");  
33 }
```

```
20  
21     ntArgs e)  
22  
23     LSERVER;User Id=sa;Password=abc@123;Database=EmployeeDB";  
24     nString);  
25  
26  
27  
28     re EmpId=108", Con);  
29  
30  
31  
32  
33  
34
```

```
22  {
23      string SqlConString = "Server=SAI-BANNU\\SQLSERVER;User Id=sa;P
24      SqlConnection Con = new SqlConnection(SqlConString);
25      Con.Open();
26      SqlCommand Cmd;
27      string Query = "Delete EmpDetails Where EmpId=" +
28          txtEmpId.Text;
29      Cmd = new SqlCommand(Query, Con);
30      Cmd.CommandType = CommandType.Text;
31      int Rows = Cmd.ExecuteNonQuery();
32      Con.Close();
33      MessageBox.Show(Rows + " Record(s) Deleted");
34 }
```