**CRUD Operations**

**C -> Create / Insert**

**R > Read Select**

**U > Update**

**D > Delete**

**READ / Select**

using System;

// Step No 1

using System.Data;

using System.Data.SqlClient;

namespace ADODemo

{

    class Program

    {

        static void Main(string[] args)

        {

            // Step 2

            // Create Connection Object

            string connectionString =  "data source=LAPTOP-53S2KQS8;initial catalog=PracticeDb1;integrated security=true";

            // SqlConnection connection= new   SqlConnection();

            // connection.ConnectionString= connectionString;

            SqlConnection connection = new SqlConnection(connectionString);

            // Step 3:

            // SqlCommand command = new SqlCommand();

            // command.CommandText ="Select \* from batch";

            // command.Connection = connection;

            SqlCommand command = new    SqlCommand("Select \* from Employee", connection);

            connection.Open();

            SqlDataReader reader = command.ExecuteReader();

            if(reader.HasRows)

            {

                while(reader.Read())

                {

                    // Console.WriteLine(reader[0] + " " + reader[1]);

                    // Console.WriteLine(reader["id"] + " " + reader["name"]);

                    for(int i=0;i<reader.FieldCount ;i++)

                    Console.Write(reader[i] + " ");

                    Console.WriteLine();

                }

                }

            else

            {

                Console.WriteLine("There are no records");

            }

            reader.Close();

            connection.Close();

            // Unmanaged Code

            reader.Dispose();

            command.Dispose();

            connection.Dispose();

        }

    }

}

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Data.SqlClient;

namespace AdoNetDemos

{

class Second

{

public static void Main()

{

//SqlConnection sqlConnection = new SqlConnection();

//string connectionString = "data source=LAPTOP-53S2KQS8;" +

// "initial catalog=PracticeDb;integrated security=true";

//sqlConnection.ConnectionString = connectionString;

SqlConnection connection = new SqlConnection("data source=LAPTOP-53S2KQS8;" +

"initial catalog=PracticeDb;integrated security=true");

//SqlCommand command = new SqlCommand();

//command.CommandText = "Select \* from Employee";

//command.Connection = sqlConnection;

SqlCommand command = new SqlCommand("Select \* from Employee",

connection);

connection.Open();

SqlDataReader reader = command.ExecuteReader();

if(reader.HasRows)

{

while(reader.Read())

{

Console.WriteLine(reader["id"].ToString()+ " " + reader["name"]);

}

}

reader.Close();

connection.Close();

}

}

}

INSERT / CREATE

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Data.SqlClient;

namespace AdoNetDemos

{

class InsertDemo

{

static void Main()

{

SqlConnection connection = new SqlConnection("data source=LAPTOP-53S2KQS8;" +

"initial catalog=PracticeDb;integrated security=true");

SqlCommand command = new SqlCommand("Insert into Employee (id, name , address, salary) values(7,'Farhan','Delhi', 90000)", connection);

connection.Open();

command.ExecuteNonQuery();

connection.Close();

}

}

}

//SqlCommand command = new SqlCommand("Insert into Employee (id, name , address, salary) values(7,'Farhan','Delhi', 90000)", connection);

//SqlCommand command = new SqlCommand("Update Employee set salary = salary + 10000 where id <4", connection);

SqlCommand command = new SqlCommand("Delete Employee where id <4", connection);

ExecuteNonQuery () > This method is used to perform DML operations in database & it returns no. of records affected. Its return type is int

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Data.SqlClient;

namespace AdoNetDemos

{

class InsertDemo

{

static void Main()

{

SqlConnection connection = new SqlConnection("data source=LAPTOP-53S2KQS8;" +

"initial catalog=PracticeDb;integrated security=true");

//SqlCommand command = new SqlCommand("Insert into Employee (id, name , address, salary) values(7,'Farhan','Delhi', 90000)", connection);

//SqlCommand command = new SqlCommand("Update Employee set salary = salary + 10000 where id IN (4,5,7)", connection);

SqlCommand command = new SqlCommand("Delete Employee where id > 4", connection);

connection.Open();

**int count = command.ExecuteNonQuery();**

**Console.WriteLine("No of Records deleted are "+ count);**

connection.Close();

}

}

}

ExecuteScalar () > It gives you single value

Give me total of Employee

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Data.SqlClient;

namespace AdoNetDemos

{

class ExecuteScalarDemo

{

static void Main()

{

SqlConnection connection = new SqlConnection("data source=LAPTOP-53S2KQS8;" +

"initial catalog=PracticeDb;integrated security=true");

SqlCommand command = new SqlCommand("Select max(salary) from Employee", connection);

connection.Open();

int maxSalary = (int)command.ExecuteScalar();

Console.WriteLine("Max Salary is "+ maxSalary);

connection.Close();

}

}

}

ExecuteScalar() method gives output in Object form , so we need to do required conversion