static void Main(string[] args)

{

string connectionstring = "Server=10.50.1.136;Database=Fresher;User id = Fresher;Password = Fresh@123;";

try

{

// SQL connection

// Connection string

// Open(); close();

// ---------

// Type 1

//SqlConnection connection1 = new SqlConnection("Server=10.50.1.136;Database=Fresher;User id = Fresher;Password = Fresh@123;");

//SqlConnection connection1 = new SqlConnection(connectionstring);

//connection1.Open();

////insetr

//// update

//connection1.Close();

// Type 2

//using ( SqlConnection connection = new SqlConnection(connectionstring))

//{

// connection.Open();

// //insetr

// // update

//}

// Commands

// ExecuteNonQuery();

//String querytoexec = "Insert into Employees\_Test (FirstName, LastName, Position, Salary ) SELECT 'Manju', 'Subramani', 'Full Stack developer', '80000' ";

//SqlConnection connection1 = new SqlConnection(connectionstring);

//connection1.Open();

////SqlCommand comment = new SqlCommand(Query / Procedure, Connection string);(syntax)

//SqlCommand comment = new SqlCommand(querytoexec, connection1);

//comment.CommandType =CommandType.Text;

//comment.ExecuteNonQuery();

////int rowsaffected = comment.ExecuteNonQuery();

////Console.WriteLine(rowsaffected.ToString() +" row affected");

//connection1.Close();

// ExecuteScalar() --Return single value

//String querytoexec = "select COUNT(\*) from Employees\_Test";

//SqlConnection connection1 = new SqlConnection(connectionstring);

//connection1.Open();

//String query2 = "Insert into Employees\_Test (FirstName, LastName, Position, Salary ) SELECT 'Jeeva', 'K', 'Jave developer', '70000' ";

//SqlCommand comment1 = new SqlCommand(query2, connection1);

//comment1.CommandType =CommandType.Text;

////comment1.ExecuteNonQuery();

//int rowsaffected = comment1.ExecuteNonQuery(); // Return no of rows affected

//Console.WriteLine(rowsaffected.ToString() +" Employee details Inserted...");

//SqlCommand comment = new SqlCommand(querytoexec, connection1);

//comment.CommandType =CommandType.Text;

//int count = (int)comment.ExecuteScalar(); // Return single value

//Console.WriteLine(count.ToString() +" Count there in the Empoyee table");

//string getdata = "Select \* from Employees\_Test";

//SqlCommand comment2 = new SqlCommand(getdata, connection1);

//comment2.CommandType =CommandType.Text;

//SqlDataReader dada = comment2.ExecuteReader(); // Retrive multiple data from sql

//while (dada.Read())

//{

// Console.WriteLine(dada["FirstName"]+" " + dada["LastName"] );

//}

//Console.WriteLine(count.ToString() +" Count there in the Empoyee table");

//connection1.Close();

// Store procedure

SqlConnection connection1 = new SqlConnection(connectionstring);

connection1.Open();

SqlCommand comment1 = new SqlCommand("pr\_getemployee", connection1);

comment1.CommandType =CommandType.StoredProcedure;

comment1.Parameters.AddWithValue("@Position", "Manager");

comment1.Parameters.AddWithValue("@empid",2);

comment1.Parameters.AddWithValue("@salary", 5000);

SqlDataReader dada = comment1.ExecuteReader();

while (dada.Read())

{

Console.WriteLine(dada["FirstName"]+" " + dada["LastName"]+" is a " + dada["Position"]+" having salary " + dada["Salary"]);

Console.WriteLine("Employeeid : "+dada[0] + " " + "Employee Name :"+ dada[1] +" "+ dada[2]);

}

}

catch (Exception ex)

{

Console.WriteLine(ex.Message);

}

Console.ReadKey();

}

-------------- SQL Data Adapter , Datatable and dataset -------

static void Main(string[] args)

{

string connectionstring = "Server=10.50.1.136;Database=Fresher;User id = Fresher;Password = Fresh@123;";

DataTable and Dataset

DataTable Emp = new DataTable();

// Columns Create

Emp.Columns.Add("EmployeeID", typeof(int));

Emp.Columns.Add("FirstName", typeof(string));

Emp.Columns.Add("LastName", typeof(string));

Emp.Columns.Add("Position", typeof(string));

// Row insert

Emp.Rows.Add(1, "Hemanth", "M", "Intern");

Emp.Rows.Add(2, "Bharath", "Murali", "Software Developer");

Emp.Rows.Add(3, "Vinoth", "D", "Software Developer");

// Alternate method

DataRow Newrow = Emp.NewRow();

Newrow[0] = 4;

Newrow[1] = "Harish";

Newrow[2] = "R";

Newrow[3] = "Network Team";

Emp.Rows.Add(Newrow);

//foreach (DataRow row in Emp.Rows)

//{

// Console.WriteLine(row[0].ToString() + row[1].ToString()+" "+ row[2].ToString() + " " +row[3].ToString());

// Console.WriteLine(row["EmployeeID"].ToString() + row["FirstName"].ToString()+" "+ row[2].ToString() + " " +row[3].ToString());

//}

// Department table

DataTable dept = new DataTable();

// Columns Create

dept.Columns.Add("DEPTID", typeof(int));

dept.Columns.Add("DEPTNAME", typeof(string));

// Row insert

dept.Rows.Add(1, "Software Team");

dept.Rows.Add(2, "Network Team");

dept.Rows.Add(3, "Coding Team");

// dataset

DataSet dataSet = new DataSet();

dataSet.Tables.Add(Emp);

dataSet.Tables.Add(dept);

dataSet.Tables[0].TableName="Employee Table";

dataSet.Tables[1].TableName="Department Table";

foreach (DataRow row in dataSet.Tables[0].Rows)

{

Console.WriteLine(row[0].ToString() + row[1].ToString()+" "+ row[2].ToString() + " " +row[3].ToString());

}

Console.WriteLine("----------------------");

foreach (DataRow row in dataSet.Tables[1].Rows)

{

Console.WriteLine(row[0].ToString() + row[1].ToString());

}

// SQLDATAADAPTER

// Fill data in dataset or datatable

SqlConnection connection = new SqlConnection(connectionstring);

//connection.Open();

SqlDataAdapter adapter = new SqlDataAdapter("pr\_getemployee", connection);

adapter.SelectCommand.CommandType=CommandType.StoredProcedure;

adapter.SelectCommand.Parameters.AddWithValue("@Position", "Manager");

adapter.SelectCommand.Parameters.AddWithValue("@empid", 1);

//DataTable empdetail = new DataTable(); // Single table

DataSet empdetail = new DataSet(); // Multiple tables

adapter.Fill(empdetail);

empdetail.Tables[0].Rows.Add(7, "Kumar", "M", "Test", "1000");

foreach (DataRow row in empdetail.Tables[0].Rows)

{

Console.WriteLine(row[0].ToString() +" | "+ row[1].ToString()+" | "+ row[2].ToString() + " | " +row[3].ToString() + " | " +row[4].ToString());

}

Console.WriteLine("----Emp salary Greater than 70000-------");

foreach (DataRow row in empdetail.Tables[1].Rows)

{

Console.WriteLine(row[0].ToString() +" | "+ row[1].ToString()+" | "+ row[2].ToString() + " | " +row[3].ToString() + " | " +row[4].ToString());

}

//SQL Bulk copy

SqlConnection connection = new SqlConnection(connectionstring);

SqlDataAdapter adapter = new SqlDataAdapter("select \* from Employees\_Test", connection);

DataTable empdetail = new DataTable();

adapter.Fill(empdetail);

SqlBulkCopy bulkcopy = new SqlBulkCopy(connection);

connection.Open();

bulkcopy.DestinationTableName ="EmpoyeeCopydata";

bulkcopy.WriteToServer(empdetail);

connection.Close();

Console.ReadKey();

}

Example workout :

public static void Main()

{

string connectionstring = "Server=10.50.1.136;Database=Fresher;User id = Fresher;Password = Fresh@123;";

// string[] employees = new string[] { "Bharath|10/10/1980|Male|Software Developer", "Hemanth|19/09/1999|Male|Intern", "Joel|05/07/1980|Female|Senior Developer", "Ananya|15/04/1990|Female|Project Manager", "Ravi|22/06/1985|Male|System Analyst", "Priya|05/08/1993|Female|UI/UX Designer", "Vikram|12/12/1988|Male|Data Scientist", "Maya|27/11/1995|Female|Software Tester", "Arjun|30/03/1987|Male|Network Engineer", "Sahana|18/01/1992|Female|Database Administrator" };

string[] employees = File.ReadAllLines("C:\\temp\\Test file Trainee\\Employeedata\_11082024.txt");

DataTable empdet = new DataTable();

empdet.Columns.Add("Name",typeof(string));

empdet.Columns.Add("DOB",typeof(string));

empdet.Columns.Add("Gender",typeof(string));

empdet.Columns.Add("Domain",typeof(string));

foreach (var employee in employees)

{

var dis = employee.Split('|');

empdet.Rows.Add(dis[0].ToString(), dis[1].ToString(), dis[2].ToString(), dis[3].ToString());

}

SqlBulkCopy copydata = new SqlBulkCopy(connectionstring);

copydata.DestinationTableName="Empsdata";

copydata.WriteToServer(empdet);

Console.WriteLine("Data Moved Successfully !!!");

Console.ReadKey();

}