

LAB - 5

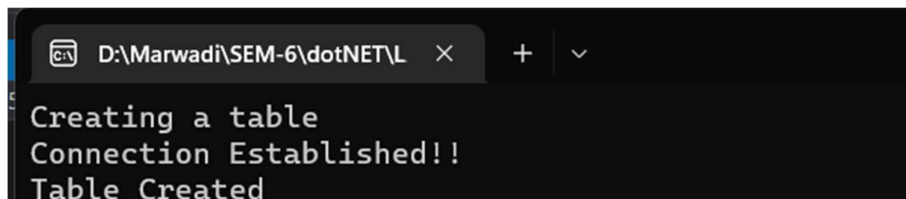
Program 1: Write a C# Console based application to create following table using ADO. Net.

Code:

```
using System;
using System.Data.SqlClient;

namespace Practical5
{
    2 references
    class Database
    {
        string connection_str = @"Data Source=(localdb)\ProjectsV13;Initial Catalog=master;Integrated Security=True;Connect
        Timeout=30;Encrypt=False;TrustServerCertificate=False;ApplicationIntent=ReadWrite;MultiSubnetFailover=False";
        1 reference
        public void create()
        {
            try
            {
                SqlConnection conn = new SqlConnection(connection_str);
                conn.Open();
                Console.WriteLine("Connection Established!!");
                string sql = @"create table employee (Emp_id int IDENTITY(1,1) PRIMARY KEY , Name varchar(30), Designation
                varchar(30), Department varchar(30), Salary int)";
                SqlCommand command = new SqlCommand(sql, conn);
                Console.WriteLine("Table Created");
                command.ExecuteNonQuery();
                command.Dispose();
                conn.Close();
            }
            catch (Exception e)
            {
                Console.WriteLine("Table already existing in database!!!");
            }
        }
    }
}
```

Output:



```
D:\Marwadi\SEM-6\dotNET\L  x  +  v
Creating a table
Connection Established!!
Table Created
```

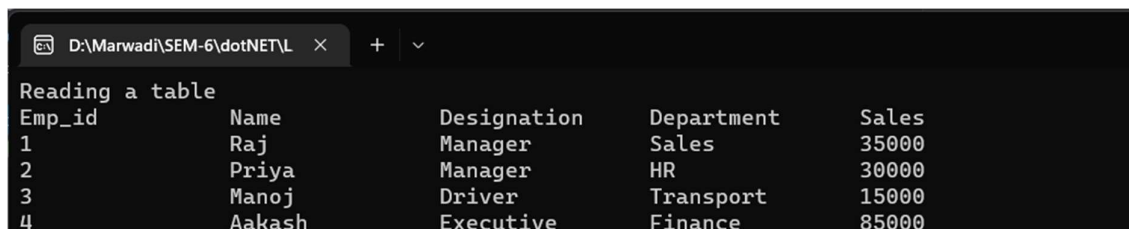
Program 2: Write a C# Console based application to display all the records of a table.

Emp_id	Name	Designation	Department	Salary
1	Raj	Manager	Sales	35000
2	Priya	Manager	HR	30000
3	Manoj	Driver	Transport	15000
4	Aakash	Executive	Finance	85000

Code:

```
1 reference
public void read()
{
    try
    {
        string output = "";
        SqlConnection conn = new SqlConnection(connection_str);
        conn.Open();
        string sql = "SELECT * FROM employee";
        //string sql = "SELECT * FROM employee WHERE Emp_id=1";
        SqlCommand command = new SqlCommand(sql, conn);
        SqlDataReader dataReader = command.ExecuteReader();
        Console.WriteLine(format("Emp_id") + format("Name")+ format("Designation")+ format("Department")+ format("Sales") + "\n" );
        while (dataReader.Read())
        {
            output = output + format(dataReader.GetValue(0).ToString()) + format(dataReader.GetValue(1).ToString()) + format
            (dataReader.GetValue(2).ToString()) + format(dataReader.GetValue(3).ToString()) + format(dataReader.GetValue(4).ToString())
            + "\n";
        }
        Console.WriteLine(output);
        dataReader.Close();
        command.Dispose();
        conn.Close();
    }
    catch (Exception e)
    {
        Console.WriteLine(e);
    }
}
```

Output:



```
D:\Marwadi\SEM-6\dotNET\L  x  +  v

Reading a table
Emp_id      Name      Designation  Department  Sales
1           Raj       Manager      Sales       35000
2           Priya     Manager      HR          30000
3           Manoj     Driver       Transport   15000
4           Aakash    Executive    Finance     85000
```

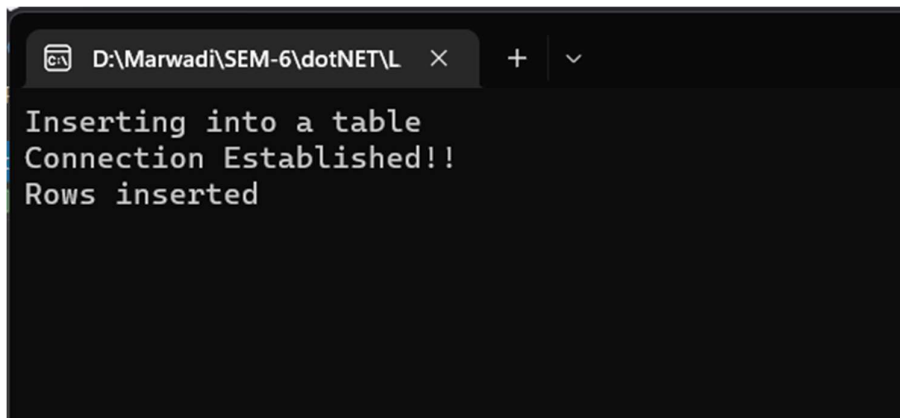
LAB - 6

Program 1: Write a C# Console based application to implement a functionality to insert a new record in the table

Code:

```
0 references
public void insert()
{
    try
    {
        SqlConnection conn = new SqlConnection(connection_str);
        conn.Open();
        Console.WriteLine("Connection Established!!");
        string sql = @"INSERT INTO employee ( Name, Designation, Department, Salary) VALUES ('Raj', 'Manager', 'Sales', 35000);
                        insert into employee(Name, Designation, Department, Salary) values('Priya', 'Manager', 'HR', 30000);
                        insert into employee(Name, Designation, Department, Salary) values('Manoj', 'Driver', 'Transport', 15000);
                        insert into employee(Name, Designation, Department, Salary) values('Aakash', 'Executive', 'Finance', 85000); ";
        SqlCommand command = new SqlCommand(sql, conn);
        Console.WriteLine("Rows inserted");
        command.ExecuteNonQuery();
        command.Dispose();
        conn.Close();
    }
    catch (Exception e)
    {
        Console.WriteLine(e);
    }
}
```

Output:



```
D:\Marwadi\SEM-6\dotNET\L  x  +  v
Inserting into a table
Connection Established!!
Rows inserted
```

Program 2: Write a C# Console based application to implement a functionality to display specific record from the table

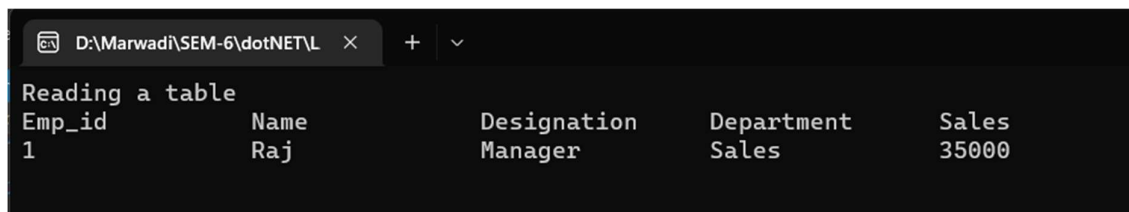
Code:

```
public void read()
{
    try
    {
        string output = "";
        SqlConnection conn = new SqlConnection(connection_str);
        conn.Open();
        //string sql = "SELECT * FROM employee";
        string sql = "SELECT * FROM employee WHERE Emp_id=1";
        SqlCommand command = new SqlCommand(sql, conn);
        SqlDataReader dataReader = command.ExecuteReader();
        Console.WriteLine(format("Emp_id") + format("Name")+ format("Designation")+ format("Department")+ format("Sales") + "\n" );
        while (dataReader.Read())
        {
            output = output + format(dataReader.GetValue(0).ToString()) + format(dataReader.GetValue(1).ToString()) + format
            (dataReader.GetValue(2).ToString()) + format(dataReader.GetValue(3).ToString()) + format(dataReader.GetValue(4).ToString()
            + "\n";
        }
        Console.WriteLine(output);
        dataReader.Close();
        command.Dispose();
        conn.Close();
    }
    catch (Exception e)
    {
        Console.WriteLine(e);
    }
}
```

```
class Program
{
    0 references
    static void Main(string[] args)
    {
        Database db1 = new Database();
        //Console.WriteLine("Creating a table");
        //db1.create();
        //Console.WriteLine("Inserting into a table");
        //db1.insert();
        Console.WriteLine("Reading a table");
        db1.read();
        //Console.WriteLine("Deleting all entries");
        //db1.delete();
        //Console.WriteLine("Reading a table");
        //db1.read();

        Console.ReadKey();
    }
}
```

Output:



```
Reading a table
Emp_id      Name      Designation  Department  Sales
1           Raj       Manager      Sales       35000
```

LAB - 7

Program 1: Create a Simple Calculator using Windows Forms.

Code:

```
using System;
using System.Windows.Forms;

namespace WindowsForms_Calc
{
    3 references
    public partial class Form1 : Form
    {
        double FirstNumber;
        double SecondNumber;
        double Result;
        string Operation;

        1 reference
        public Form1()
        {
            InitializeComponent();
            this.MinimizeBox = false;
            this.MaximizeBox = false;
            this.FormBorderStyle = FormBorderStyle.FixedSingle;
        }

        1 reference
        private void num_0_Click(object sender, EventArgs e)
        {
            if (textBox1.Text == "0" && textBox1.Text != null)
            {
                textBox1.Text = "0";
            }
            else
            {
                textBox1.Text = textBox1.Text + "0";
            }
        }
    }
}
```



```
private void subtract_Click(object sender, EventArgs e)
{
    FirstNumber = Convert.ToDouble(textBox1.Text);
    textBox1.Text = "0";
    Operation = "-";
}
```

1 reference

```
private void num_3_Click(object sender, EventArgs e)
{
    if (textBox1.Text == "0" && textBox1.Text != null)
    {
        textBox1.Text = "3";
    }
    else
    {
        textBox1.Text = textBox1.Text + "3";
    }
}
```

1 reference

```
private void clear_Click(object sender, EventArgs e)
{
    textBox1.Text = "0";
}
```

```
private void point_Click(object sender, EventArgs e)
{
    if (textBox1.Text != null)
    {
        textBox1.Text = textBox1.Text + ".";
    }
}
```

1 reference

```
private void num_2_Click(object sender, EventArgs e)
{
    if (textBox1.Text == "0" && textBox1.Text != null)
    {
        textBox1.Text = "2";
    }
    else
    {
        textBox1.Text = textBox1.Text + "2";
    }
}
```

```
1 reference
private void num_1_Click(object sender, EventArgs e)
{
    if (textBox1.Text == "0" && textBox1.Text != null)
    {
        textBox1.Text = "1";
    }
    else
    {
        textBox1.Text = textBox1.Text + "1";
    }
}
```

```
1 reference
private void num_4_Click(object sender, EventArgs e)
{
    if (textBox1.Text == "0" && textBox1.Text != null)
    {
        textBox1.Text = "4";
    }
    else
    {
        textBox1.Text = textBox1.Text + "4";
    }
}
```

```
private void num_5_Click(object sender, EventArgs e)
{
    if (textBox1.Text == "0" && textBox1.Text != null)
    {
        textBox1.Text = "5";
    }
    else
    {
        textBox1.Text = textBox1.Text + "5";
    }
}
```

```
1 reference
private void num_6_Click(object sender, EventArgs e)
{
    if (textBox1.Text == "0" && textBox1.Text != null)
    {
        textBox1.Text = "6";
    }
    else
    {
        textBox1.Text = textBox1.Text + "6";
    }
}
```



```

1 reference
private void equals_Click(object sender, EventArgs e)
{
    SecondNumber = Convert.ToDouble(textBox1.Text);
    if (Operation == "+") {
        Result = (FirstNumber + SecondNumber);
        textBox1.Text = Convert.ToString(Result);
        FirstNumber = Result;
    }
    if (Operation == "-") {
        Result = (FirstNumber - SecondNumber);
        textBox1.Text = Convert.ToString(Result);
        FirstNumber = Result;
    }
    if (Operation == "*") {
        Result = (FirstNumber * SecondNumber);
        textBox1.Text = Convert.ToString(Result);
        FirstNumber = Result;
    }
    if (Operation == "/") {
        if (SecondNumber == 0) {
            textBox1.Text = "Cannot divide by zero";
        }
        else {
            Result = (FirstNumber / SecondNumber);
            textBox1.Text = Convert.ToString(Result);
            FirstNumber = Result;
        }
    }
}

```

```

1 reference
private void add_Click(object sender, EventArgs e)
{
    FirstNumber = Convert.ToDouble(textBox1.Text);
    textBox1.Text = "0";
    Operation = "+";
}

1 reference
private void multiply_Click(object sender, EventArgs e)
{
    FirstNumber = Convert.ToDouble(textBox1.Text);
    textBox1.Text = "0";
    Operation = "*";
}

1 reference
private void divide_Click(object sender, EventArgs e)
{
    FirstNumber = Convert.ToDouble(textBox1.Text);
    textBox1.Text = "0";
    Operation = "/";
}

1 reference
private void subtract_Click(object sender, EventArgs e)
{
    FirstNumber = Convert.ToDouble(textBox1.Text);
    textBox1.Text = "0";
    Operation = "-";
}

```

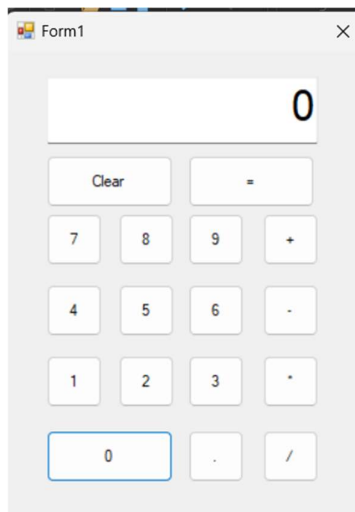


```
1 reference
private void num_7_Click(object sender, EventArgs e)
{
    if (textBox1.Text == "0" && textBox1.Text != null)
    {
        textBox1.Text = "7";
    }
    else
    {
        textBox1.Text = textBox1.Text + "7";
    }
}
```

```
1 reference
private void num_8_Click(object sender, EventArgs e)
{
    if (textBox1.Text == "0" && textBox1.Text != null)
    {
        textBox1.Text = "8";
    }
    else
    {
        textBox1.Text = textBox1.Text + "8";
    }
}
```

```
1 reference
private void num_9_Click(object sender, EventArgs e)
{
    if (textBox1.Text == "0" && textBox1.Text != null)
    {
        textBox1.Text = "9";
    }
    else
    {
        textBox1.Text = textBox1.Text + "9";
    }
}
```

Output:



Program 2: Create a Windows Forms that will change the background color, forecolor and styling of the given text

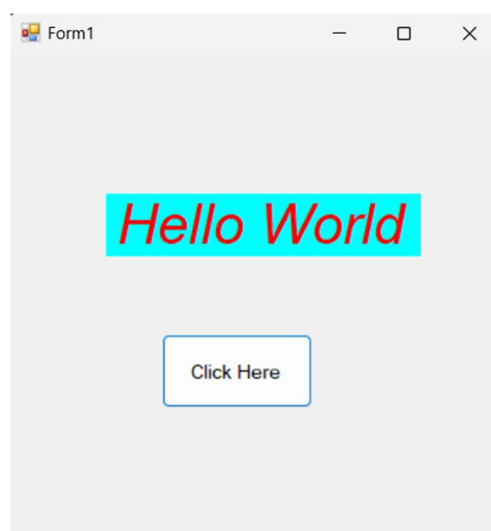
Code:

```
using System;
using System.Drawing;
using System.Windows.Forms;

namespace WindowsForm_color
{
    3 references
    public partial class Form1 : Form
    {
        1 reference
        public Form1()
        {
            InitializeComponent();
        }

        1 reference
        private void button1_Click(object sender, EventArgs e)
        {
            label1.BackColor = Color.Aqua;
            label1.ForeColor = Color.Red;
            label1.Font = new Font("Arial", 30, FontStyle.Italic);
        }
    }
}
```

Output:



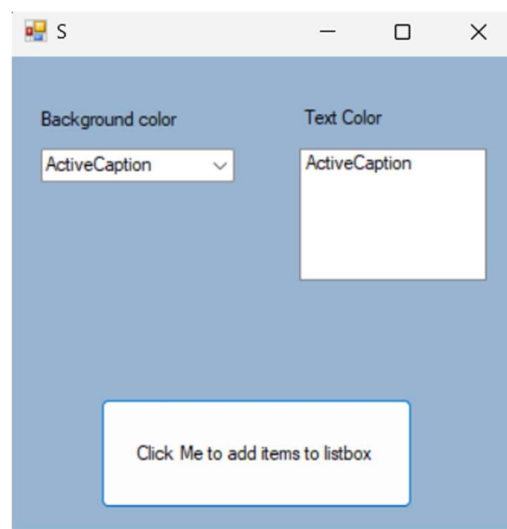
LAB - 8

Program 1: Create a Windows Form that will move the data from one tool to other tool (Usage of ComboBox and ListBox)

Code:

```
1  using System;
2  using System.Drawing;
3  using System.Windows.Forms;
4
5  namespace ComboBox
6  {
7      public partial class Form1 : Form
8      {
9          public Form1()
10         {
11             InitializeComponent();
12             foreach (string s in Enum.GetNames(typeof(KnownColor)))
13                 comboBox1.Items.Add(s);
14         }
15
16         1 reference
17         private void button1_Click(object sender, EventArgs e)
18         {
19             this.BackColor = Color.FromName(comboBox1.SelectedItem.ToString());
20             listBox1.Items.Add(comboBox1.SelectedItem.ToString());
21         }
22     }
23 }
```

Output:



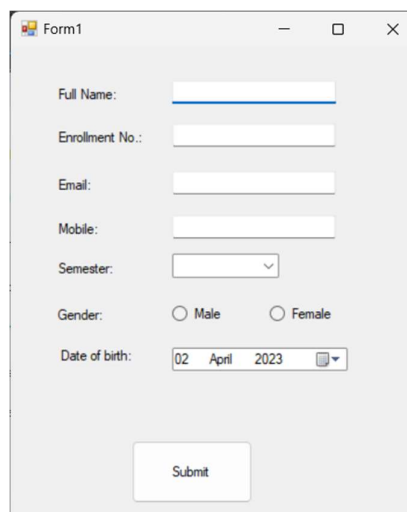
Program 2: Create a GUI for the following: Consider textbox(txt1) for Full Name, textbox(txt2) for enrolment, textbox(txt3) for email, textbox(txt4) for mobile, combobox(cmb1) for Semester, radiobutton(rd1,rd2) for Gender and datetimepicker(dtp1) for birthdate and button(btn1). Write backend code for taking input of each and display all values in pop-up box with proper message on button (btn1) click.

Code:

```
using System;
using System.Windows.Forms;

namespace Student_Form
{
    3 references
    public partial class Form1 : Form
    {
        string name,en,email,mob,sem,gender,dob;
        1 reference
        public Form1()
        {
            InitializeComponent();
        }
        1 reference
        private void bt1_Click(object sender, EventArgs e)
        {
            name = txt1.Text;
            en = txt2.Text;
            email = txt3.Text;
            mob = txt4.Text;
            sem = cmb1.SelectedItem.ToString();
            if (rd1.Checked)
                gender = rd1.Text;
            else
                gender = rd2.Text;
            dob = dtp1.Text;
            MessageBox.Show("Name: "+name+"\nEnrollment No: "+en+"\nEmail:"+email+"\nMobile Number:" +mob
                +"\nSemester: "+sem+"\nGender: "+gender+"\nDOB:"+dob);
        }
    }
}
```

Output:



Form1

Full Name:

Enrollment No.:

Email:

Mobile:

Semester:

Gender: ☐ Male ☐ Female

Date of birth:

LAB - 9

Program 1: Create a GUI for the following: Consider textbox(txt1) for Full Name, textbox(txt2) for enrolment, textbox(txt3) for email, textbox(txt4) for mobile, textArea(txtarea1) for Address, textbox(txt5) for City, combobox(cmb1) for Semester, radiobutton(rd1,rd2) for Gender and datetimepicker(dtp1) for birthdate, checkbox(ck1) for Agree to Register and button(btn1). Write backend code for taking input of each control and if Agree checkbox is checked, then store all these data in the database. Show Pop-Up message: “Registration Successful”.

Code:

```
using System;
using System.Data.SqlClient;
using System.Windows.Forms;

3 references
public partial class Form1 : Form
{
    internal string gender;

    1 reference
    public Form1()
    {
        InitializeComponent();
    }

    1 reference
    private void btn1_Click(object sender, EventArgs e)
    {
        string tc = chk_tc.Checked.ToString();
        string conn_str = @"Data Source=(localdb)\ProjectsV13;Initial Catalog=Demodb;Integrated Security=True;Connect
        Timeout=30;Encrypt=False;TrustServerCertificate=False;ApplicationIntent=ReadWrite;MultiSubnetFailover=False";
        SqlConnection conn = new SqlConnection(conn_str);
        string sql = @"INSERT INTO student VALUES ('" + txt1.Text + "', " + txt2.Text + ", " + txt3.Text + ", " +
        txt4.Text + ", " + cmb1.SelectedItem.ToString() + ", " + gender + ", " + dtp1.Text + ", " + tc + "');";
        SqlCommand cmd = new SqlCommand(sql, conn);

        if (rd1.Checked)
            gender = rd1.Text;
        else
            gender = rd2.Text;
        if (chk_tc.Checked == true)
        {
```

```
            try
            {
                conn.Open();
                cmd.ExecuteNonQuery();
                conn.Close();
                MessageBox.Show("Records Inserted!");
            }
            catch (Exception err)
            {
                MessageBox.Show(err.ToString());
            }
        }
        else
        {
            MessageBox.Show("Accept T&C!");
        }
    }
}
```

Output:

Full Name:

Enrollment No.:

Email:

Mobile:

Semester:

Gender: ☐ Male ☐ Female

Date of birth:

Terms and Conditions: ☐ AGREE

LAB - 10

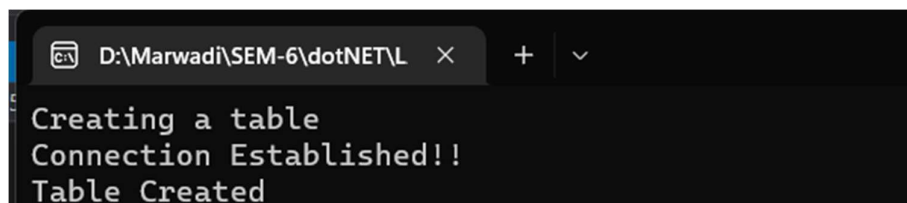
Program 1: Write a Windows based application to create following table using ADO. Net.

Code:

```
using System;
using System.Data.SqlClient;

namespace Practical5
{
    2 references
    class Database
    {
        string connection_str = @"Data Source=(localdb)\ProjectsV13;Initial Catalog=master;Integrated Security=True;Connect
        Timeout=30;Encrypt=False;TrustServerCertificate=False;ApplicationIntent=ReadWrite;MultiSubnetFailover=False";
        1 reference
        public void create()
        {
            try
            {
                SqlConnection conn = new SqlConnection(connection_str);
                conn.Open();
                Console.WriteLine("Connection Established!!");
                string sql = @"create table employee (Emp_id int IDENTITY(1,1) PRIMARY KEY , Name varchar(30), Designation
                varchar(30), Department varchar(30), Salary int)";
                SqlCommand command = new SqlCommand(sql, conn);
                Console.WriteLine("Table Created");
                command.ExecuteNonQuery();
                command.Dispose();
                conn.Close();
            }
            catch (Exception e)
            {
                Console.WriteLine("Table already existing in database!!!");
            }
        }
    }
}
```

Output:



```
D:\Marwadi\SEM-6\dotNET\L  ×  +  ∨
Creating a table
Connection Established!!
Table Created
```

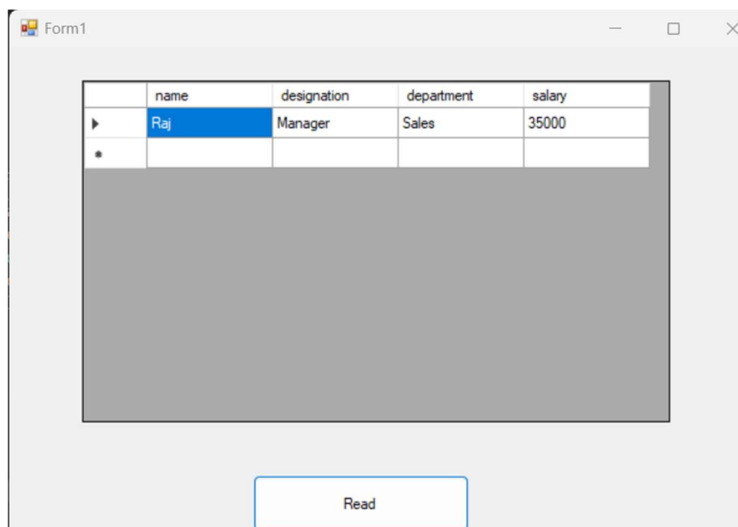
Program 2: Write a C# Windows based application to display all the records of a table.

Code:

```
1 reference
public Form1()
{
    InitializeComponent();
}
1 reference
private void button1_Click(object sender, EventArgs e)
{
    string conn_str = @"Data Source=(localdb)\ProjectsV13;Initial Catalog=Demodb;Integrated Security=True;Connect
    Timeout=30;Encrypt=False;TrustServerCertificate=False;ApplicationIntent=ReadWrite;MultiSubnetFailover=False"
    ;
    SqlConnection conn = new SqlConnection(conn_str);
    string sql = @"SELECT name,designation,department,salary from employee where emp_id=1;";
    //SqlCommand cmd = new SqlCommand(sql, conn);
    DataTable dt=null;

    SqlDataAdapter da;
    try
    {
        conn.Open();
        dt = new DataTable();
        da = new SqlDataAdapter(sql, conn);
        da.Fill(dt);
        da.Dispose();
        dataGridView1.DataSource = dt;
        conn.Close();
    }
    catch (Exception err)
    {
        MessageBox.Show("" + err);
    }
}
```

Output:



	name	designation	department	salary
▶	Raj	Manager	Sales	35000
*				

Read

LAB - 11

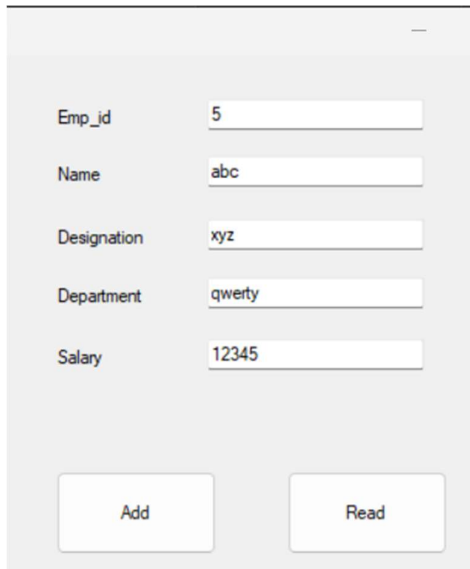
Program 1: Write a C# Windows based application to implement a functionality to insert a new record in the table

Code:

```
3 references
public partial class Form1 : Form
{
    1 reference
    public Form1()
    {
        InitializeComponent();
    }
}

1 reference
private void bt1_Click(object sender, EventArgs e)
{
    string conn_str = @"Data Source=(localdb)\ProjectsV13;Initial Catalog=Demodb;Integrated Security=True;Connect
    Timeout=30;Encrypt=False;TrustServerCertificate=False;ApplicationIntent=ReadWrite;MultiSubnetFailover=False"
    ;
    SqlConnection conn = new SqlConnection(conn_str);
    string sql = @"INSERT INTO employee VALUES ( '" + txt2.Text + "', '" + txt3.Text + "', '" + txt4.Text + "', '" +
    txt5.Text + "')";
    SqlCommand cmd = new SqlCommand(sql, conn);
    try
    {
        conn.Open();
        cmd.ExecuteNonQuery();
        conn.Close();
        MessageBox.Show("Record Inserted");
    }
    catch (Exception err)
    {
        MessageBox.Show(err.ToString());
    }
}
```

Output:



Emp_id	5
Name	abc
Designation	xyz
Department	qwerty
Salary	12345

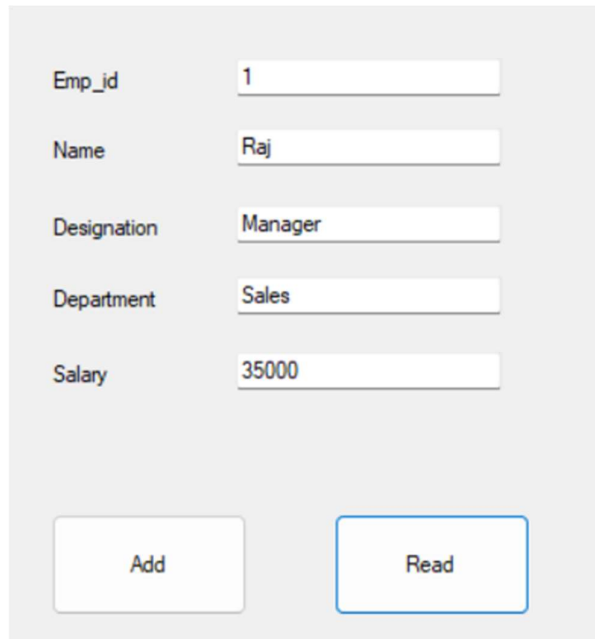
AddRead

Program 2: Write a C# Windows based application to implement a functionality to display specific record from the table

Code:

```
1 reference
private void btn2_Click(object sender, EventArgs e)
{
    string conn_str = @"Data Source=(localdb)\ProjectsV13;Initial Catalog=Demodb;Integrated Security=True;Connect
        Timeout=30;Encrypt=False;TrustServerCertificate=False;ApplicationIntent=ReadWrite;MultiSubnetFailover=False";
    ;
    SqlConnection conn = new SqlConnection(conn_str);
    string sql = @"SELECT name,designation,department,salary from employee where emp_id=" + txt1.Text+"";
    SqlCommand cmd = new SqlCommand(sql, conn);
    SqlDataReader dr;
    try
    {
        conn.Open();
        dr = cmd.ExecuteReader();
        while (dr.Read())
        {
            txt2.Text = dr.GetValue(0).ToString();
            txt3.Text = dr.GetValue(1).ToString();
            txt4.Text = dr.GetValue(2).ToString();
            txt5.Text = dr["salary"].ToString();
        }
        dr.Close();
        cmd.Dispose();
        conn.Close();
    }
    catch (Exception err)
    {
        MessageBox.Show("" + err);
    }
}
```

Output:



The screenshot shows a Windows application window with a light gray background. It contains five text boxes for displaying employee data, each with a label to its left. Below the text boxes are two buttons: 'Add' and 'Read'. The 'Read' button is highlighted with a blue border.

Label	Value
Emp_id	1
Name	Raj
Designation	Manager
Department	Sales
Salary	35000

Buttons: Add, Read

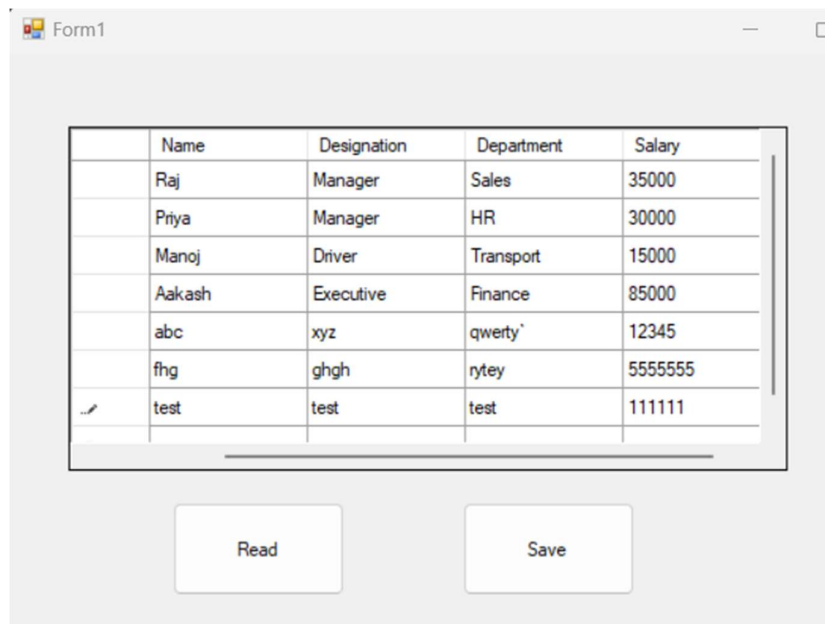
LAB - 12

Program 1: Write a C# Windows based application to implement a functionality to insert a new record in the table

Code:

```
1 reference
private void button2_Click(object sender, EventArgs e)
{
    string conn_str = @"Data Source=(localdb)\ProjectsV13;Initial Catalog=Demodb;Integrated Security=True;Connect
        Timeout=30;Encrypt=False;TrustServerCertificate=False;ApplicationIntent=ReadWrite;MultiSubnetFailover=False";
    SqlConnection conn = new SqlConnection(conn_str);
    conn.Open();
    // Allow the user to add new rows to the DataGridView
    dataGridView1.AllowUserToAddRows = true;
    SqlDataAdapter adapter = new SqlDataAdapter("SELECT * FROM employee", conn);
    SqlCommandBuilder builder = new SqlCommandBuilder(adapter);
    adapter.Update((DataTable)dataGridView1.DataSource);
    conn.Close();
}
```

Output:



Name	Designation	Department	Salary
Raj	Manager	Sales	35000
Priya	Manager	HR	30000
Manoj	Driver	Transport	15000
Aakash	Executive	Finance	85000
abc	xyz	qwerty	12345
fhg	ghgh	rytey	5555555
test	test	test	111111

Read Save

Program 2: Write a C# Windows based application to implement a functionality to display specific record from the table

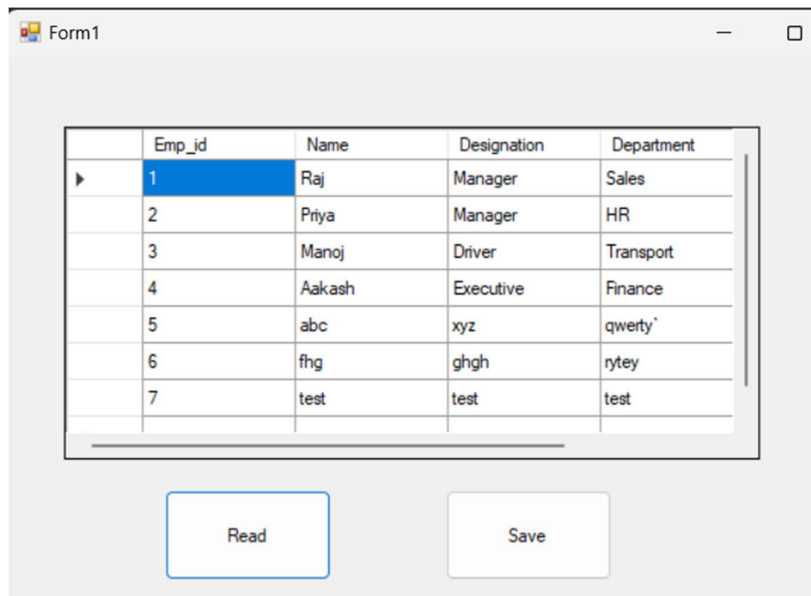
Code:

```
3 references
public partial class Form1 : Form
{
    1 reference
    public Form1()...

    1 reference
    private void button1_Click(object sender, EventArgs e)
    {
        string conn_str = @"Data Source=(localdb)\ProjectsV13;Initial Catalog=Demodb;Integrated Security=True;Connect
        Timeout=30;Encrypt=False;TrustServerCertificate=False;ApplicationIntent=ReadWrite;MultiSubnetFailover=False";
        SqlConnection conn = new SqlConnection(conn_str);
        string sql = @"SELECT * from employee";
        DataTable dt = null;

        SqlDataAdapter da;
        try
        {
            conn.Open();
            dt = new DataTable();
            da = new SqlDataAdapter(sql, conn);
            da.Fill(dt);
            da.Dispose();
            dataGridView1.DataSource = dt;
            conn.Close();
        }
        catch (Exception err)
        {
            MessageBox.Show("" + err);
        }
    }
}
```

Output:



	Emp_id	Name	Designation	Department
▶	1	Raj	Manager	Sales
	2	Priya	Manager	HR
	3	Manoj	Driver	Transport
	4	Aakash	Executive	Finance
	5	abc	xyz	qwerty
	6	fng	ghgh	rytey
	7	test	test	test

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Program 1: Write a C# code to generate 3 different lines of different colors

Code:

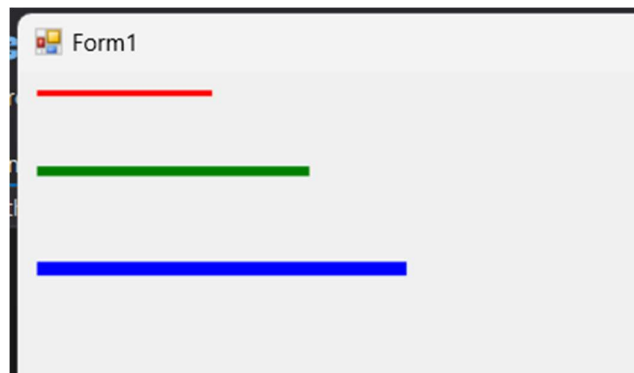
```
3 references
public partial class Form1 : Form
{
    1 reference
    public Form1()
    {
        InitializeComponent();
    }
    1 reference
    private void Form1_Paint_1(object sender, PaintEventArgs e)
    {
        Graphics g = e.Graphics;

        // red line
        Pen redPen = new Pen(Color.Red, 3);
        Point startPoint1 = new Point(10, 10);
        Point endPoint1 = new Point(100, 10);
        g.DrawLine(redPen, startPoint1, endPoint1);

        // green line
        Pen greenPen = new Pen(Color.Green, 5);
        Point startPoint2 = new Point(10, 50);
        Point endPoint2 = new Point(150, 50);
        g.DrawLine(greenPen, startPoint2, endPoint2);

        // blue line
        Pen bluePen = new Pen(Color.Blue, 7);
        Point startPoint3 = new Point(10, 100);
        Point endPoint3 = new Point(200, 100);
        g.DrawLine(bluePen, startPoint3, endPoint3);
    }
}
```

Output:



Program 2: Write a C# code to generate 4 different lines of Multicolor Rectangle

Code:

```
public Form1()
{
    InitializeComponent();
}

1 reference
private void Form1_Paint(object sender, PaintEventArgs e)
{
    Graphics g = e.Graphics;

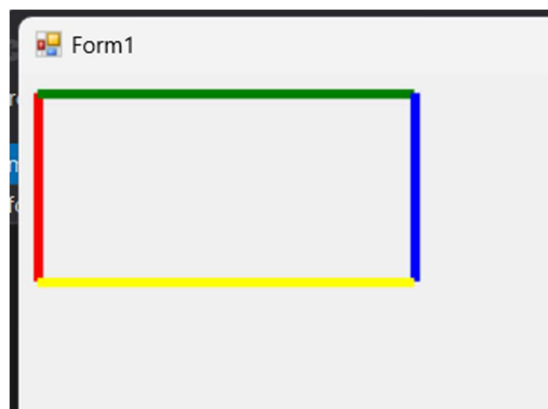
    // Define the rectangle
    Rectangle rectangle = new Rectangle(10, 10, 200, 100);

    // Define the pens for each side
    Pen leftPen = new Pen(Color.Red, 5);
    Pen topPen = new Pen(Color.Green, 5);
    Pen rightPen = new Pen(Color.Blue, 5);
    Pen bottomPen = new Pen(Color.Yellow, 5);

    // Draw the rectangle with the multicolor sides
    g.DrawLine(leftPen, rectangle.Left, rectangle.Top, rectangle.Left, rectangle.Bottom);
    g.DrawLine(topPen, rectangle.Left, rectangle.Top, rectangle.Right, rectangle.Top);
    g.DrawLine(rightPen, rectangle.Right, rectangle.Top, rectangle.Right, rectangle.Bottom);
    g.DrawLine(bottomPen, rectangle.Left, rectangle.Bottom, rectangle.Right, rectangle.Bottom);

    // Dispose the pens
    leftPen.Dispose();
    topPen.Dispose();
    rightPen.Dispose();
    bottomPen.Dispose();
}
```

Output:



Program 3: Write a C# code to generate 2 ellipses on a windows form.**Code:**

```
public Form1()
{
    InitializeComponent();
}

private void Form1_Paint(object sender, PaintEventArgs e)
{
    Graphics g = e.Graphics;

    // first ellipse
    Rectangle ellipse1Rect = new Rectangle(50, 50, 100, 200);
    g.DrawEllipse(Pens.Red, ellipse1Rect);

    // second ellipse
    Rectangle ellipse2Rect = new Rectangle(200, 100, 200, 100);
    g.DrawEllipse(Pens.Green, ellipse2Rect);
}
```

Output: