```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace Armstrong
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void textBox1_TextChanged(object sender, EventArgs e)
        {

        }

        private void button1_Click(object sender, EventArgs e)
        {
            int n, c, sum = 0, temp;
            temp = Convert.ToInt32(textBox1.Text);
            int a = Convert.ToInt32(textBox1.Text);
            while (a>0)
            {
                n = a % 10;
                c = (int)Math.Pow(n, 3);
                sum += c;
                a /= 10;
            }
            if(sum==temp)
            {
                MessageBox.Show("ArmStrong");
            }
            else
            {
                MessageBox.Show("Not ArmStrong ");
            }
        }
    }
}
```

1)SET_2 (2)—Product id

```
using System;
```

```
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using System.Data.SqlClient;
namespace Internal2
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
         Cfill();
         sfill();
      }

      public void Cfill()
      {
         comboBox1.Items.Clear();
         SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\megha\OneDrive\Documents\Intern
al2.mdf;Integrated Security=True;Connect Timeout=30");
         string q = "select * from Product_Info";
         SqlCommand cmd = new SqlCommand(q, con);
         try
         {
            con.Open();
            SqlDataReader dr = cmd.ExecuteReader();
```

```
            while (dr.Read())
            {
                string product_type = dr.GetString(0);
                comboBox1.Items.Add(product_type);
            }
        }
        catch (SqlException excep)
        {
            MessageBox.Show(excep.Message);
        }
        con.Close();
    }
    public void sfill()
    {
        comboBox2.Items.Clear();
        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\megha\OneDrive\Documents\Intern
al2.mdf;Integrated Security=True;Connect Timeout=30");
        string q = "select * from Product";
        SqlCommand cmd = new SqlCommand(q, con);
        try
        {
            con.Open();
            SqlDataReader dr = cmd.ExecuteReader();
            while (dr.Read())
            {
                string subcategory_id = dr.GetString(1);
                comboBox2.Items.Add(subcategory_id);
            }
        }
        catch (SqlException excep)
        {
```

```
            MessageBox.Show(excep.Message);
        }
        con.Close();
    }
    public void disp_Product()
    {
        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\megha\OneDrive\Documents\Intern
al2.mdf;Integrated Security=True;Connect Timeout=30");
        con.Open();
        SqlCommand cmd = con.CreateCommand();
        cmd.CommandType = CommandType.Text;
        cmd.CommandText = "select * from Product";
        DataTable dt = new DataTable();
        SqlDataAdapter da = new SqlDataAdapter(cmd);
        da.Fill(dt);
        dataGridView1.DataSource = dt;
        con.Close();
    }
    public void disp_Product_Info()
    {
        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\megha\OneDrive\Documents\Intern
al2.mdf;Integrated Security=True;Connect Timeout=30");
        con.Open();
        SqlCommand cmd = con.CreateCommand();
        cmd.CommandType = CommandType.Text;
        cmd.CommandText = "select * from Product_Info";
        DataTable dt = new DataTable();
        SqlDataAdapter da = new SqlDataAdapter(cmd);
        da.Fill(dt);
        dataGridView2.DataSource = dt;
```

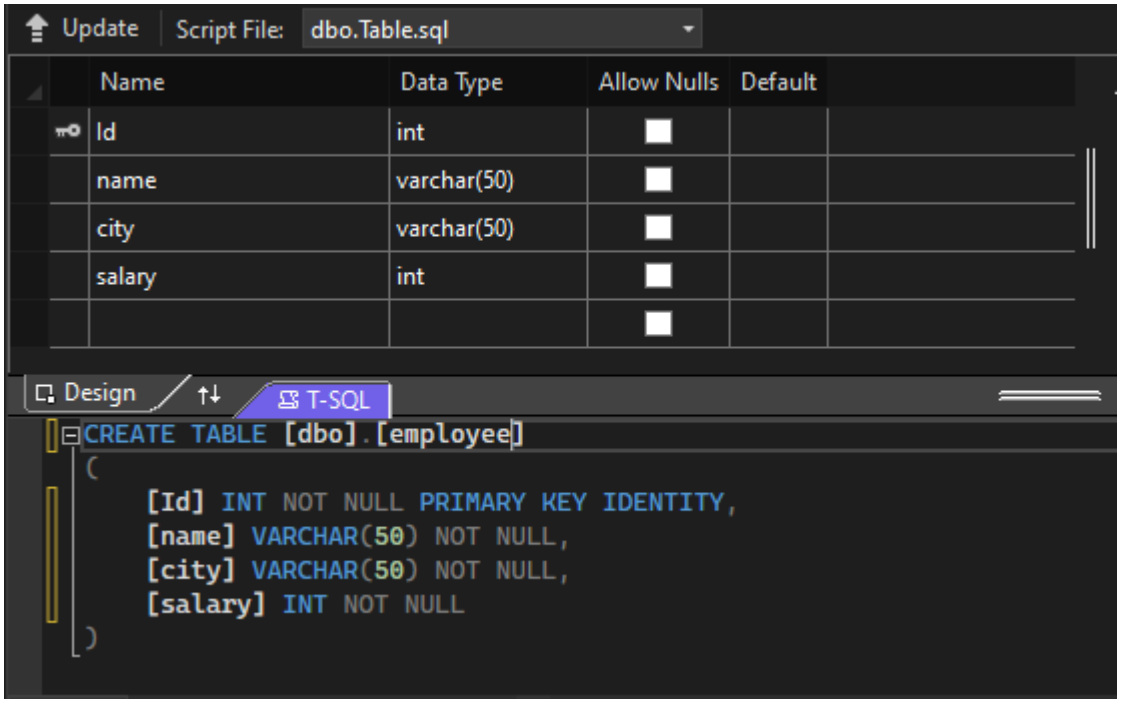
```
            con.Close();
        }
        private void button1_Click(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\megha\OneDrive\Documents\Intern
al2.mdf;Integrated Security=True;Connect Timeout=30");
            con.Open();
            try
            {
                string str = "insert into Product_Info
(subcategory_id,Sub_cat_Name,Sub_cat_price,Sub_cat_quantity,product_id) values('" +
comboBox1.Text + "','" + textBox3.Text + "','" + textBox2.Text + "','" + textBox4.Text + "','" +
textBox1.Text + "'); ";
                SqlCommand cmd = new SqlCommand(str, con);
                cmd.ExecuteNonQuery();

                string str1 = "select max(subcategory_id) from Product_Info;";
                SqlCommand cmd1 = new SqlCommand(str1, con);
                SqlDataReader dr = cmd1.ExecuteReader();
                if (dr.Read())
                {
                    MessageBox.Show("Data saved Successfully. ");
                    textBox1.Text = "";
                    textBox2.Text = "";
                    textBox3.Text = "";
                    textBox4.Text = "";
                    comboBox1.Text = "--SELECT--";
                }
            }
            catch (SqlException excep)
            {
                MessageBox.Show(excep.Message);
```

```
        }
        con.Close();
        Cfill();
        sfill();
        disp_Product();
        disp_Product_Info();
    }

    private void comboBox2_SelectedIndexChanged(object sender, EventArgs e)
    {
        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\megha\OneDrive\Documents\Intern
al2.mdf;Integrated Security=True;Connect Timeout=30");
        string q = "select * from Product where product_type = '" + comboBox2.Text + "';";
        SqlCommand cmd = new SqlCommand(q, con);
        try
        {
            con.Open();
            SqlDataReader dr = cmd.ExecuteReader();
            while (dr.Read())
            {
                string product_id = dr.GetInt32(0).ToString();


                textBox1.Text = product_id;
            }
        }
        catch (SqlException excep)
        {
            MessageBox.Show(excep.Message);
        }
        con.Close();
    }
```

```
    private void comboBox1_SelectedIndexChanged(object sender, EventArgs e)
    {
        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\megha\OneDrive\Documents\Intern
al2.mdf;Integrated Security=True;Connect Timeout=30");
        string q = "select * from Product_Info where subcategory_id  = '" + comboBox1.Text + "';";
        SqlCommand cmd = new SqlCommand(q, con);
        try
        {
            con.Open();
            SqlDataReader dr = cmd.ExecuteReader();
            while (dr.Read())
            {
                string Sub_cat_Name = dr.GetString(1);
                string Sub_cat_price = dr.GetInt32(2).ToString();
                string Sub_cat_quantity = dr.GetInt32(3).ToString();

                textBox3.Text = Sub_cat_Name;
                textBox2.Text = Sub_cat_price;
                textBox4.Text = Sub_cat_quantity;
            }
        }
        catch (SqlException excep)
        {
            MessageBox.Show(excep.Message);
        }
        con.Close();
    }

    private void button2_Click(object sender, EventArgs e)
    {
```

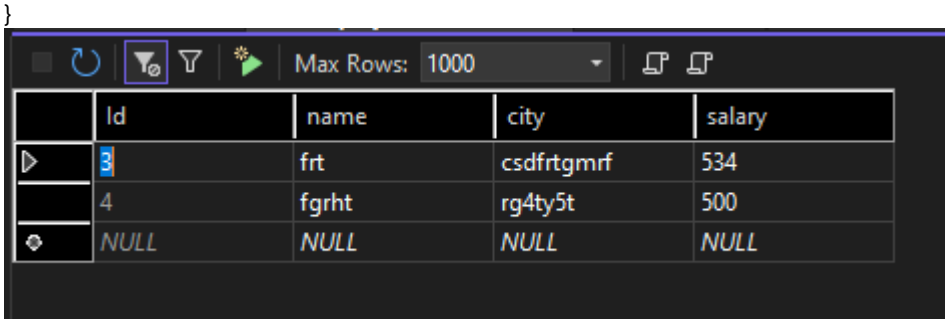
```
        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\megha\OneDrive\Documents\Intern
al2.mdf;Integrated Security=True;Connect Timeout=30");

        string query = ("update Product set product_id = @product_id, product_type =
@product_type where product_id = @product_id");

        SqlCommand cmd = new SqlCommand(query, con);

        cmd.Parameters.AddWithValue("@product_id", textBox1.Text);

        cmd.Parameters.AddWithValue("@product_type", comboBox2.Text);

        try

        {

           con.Open();

           int i = cmd.ExecuteNonQuery();

           if (i > 0)

              MessageBox.Show("Data is updated");

           else

              MessageBox.Show("Data not found");

        }

        catch (SqlException excep)

        {

           MessageBox.Show(excep.Message);

        }

        con.Close();

        Cfill();

        sfill();

        disp_Product();

        disp_Product_Info();

     }

  }

}
```

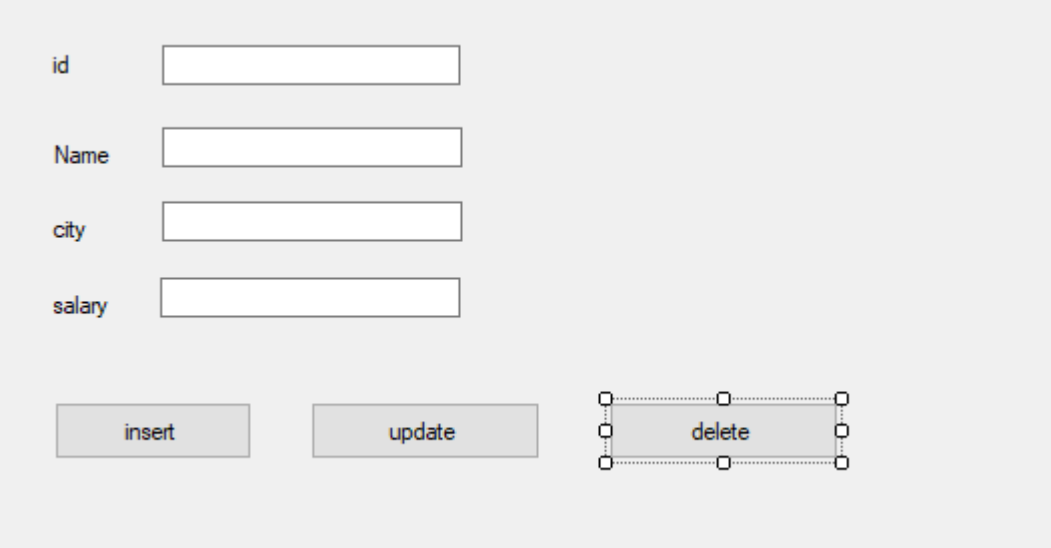
1) Insert, update, delete



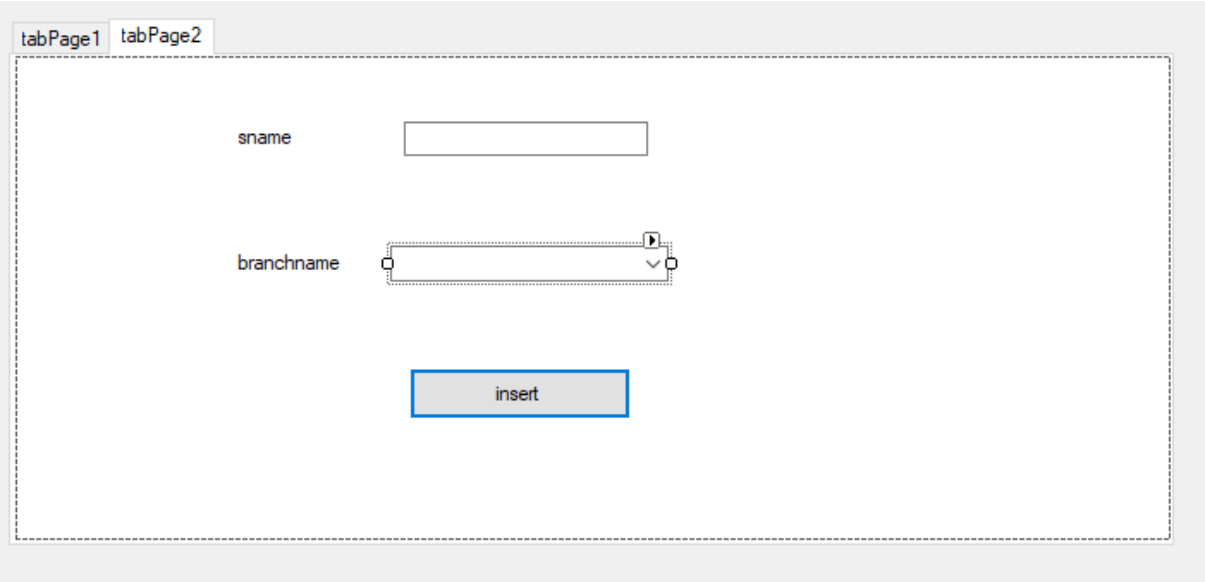

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using System.Data.SqlClient;
namespace exam
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void button1_insert_Click(object sender, EventArgs e)

{
         SqlConnection con = new SqlConnection("Data
Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=C:\\Users\\Dell\\Documents\\exam1.mdf;Integrated
Security=True;Connect Timeout=30");
         String q = "insert into employee values(@name,@city,@salary)";
         SqlCommand cmd = new SqlCommand(q,con);
         cmd.Parameters.AddWithValue("@name", textBox1_n.Text);
         cmd.Parameters.AddWithValue("@city", textBox2_c.Text);
         cmd.Parameters.AddWithValue("@salary", textBox3_s.Text);
         MessageBox.Show("inserted");
         con.Open();
         cmd.ExecuteNonQuery();
         con.Close();
```

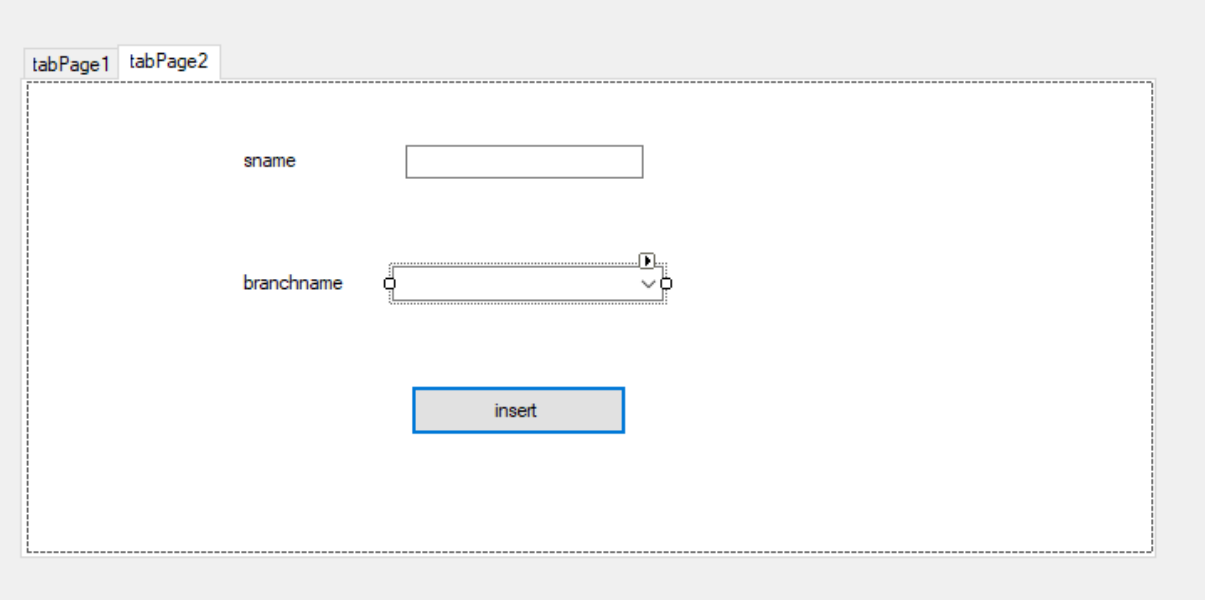
```
        }

        private void button2_update_Click(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection("Data
Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=C:\\Users\\Dell\\Documents\\exam1.mdf;Integrated
Security=True;Connect Timeout=30");
            String q = "update employee set name=@name,city=@city,salary=@salary where id=@id";
            SqlCommand cmd = new SqlCommand(q, con);
            cmd.Parameters.AddWithValue("@name", textBox1_n.Text);
            cmd.Parameters.AddWithValue("@city", textBox2_c.Text);
            cmd.Parameters.AddWithValue("@salary", textBox3_s.Text);
            cmd.Parameters.AddWithValue("@id", Convert.ToInt32(textBox1.Text));
            MessageBox.Show("updated");
            con.Open();
            cmd.ExecuteNonQuery();
            con.Close();

        }

        private void button3_delete_Click(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection("Data
Source=(LocalDB)\\MSSQLLocalDB;AttachDbFilename=C:\\Users\\Dell\\Documents\\exam1.mdf;Integrated
Security=True;Connect Timeout=30");
            string q = "delete from employee where name = @name";
            SqlCommand cmd = new SqlCommand(q, con);
            cmd.Parameters.AddWithValue("@name", textBox1_n.Text);
            con.Open();
            cmd.ExecuteNonQuery();
            con.Close();

            MessageBox.Show("deleted");
        }
    }
}
```

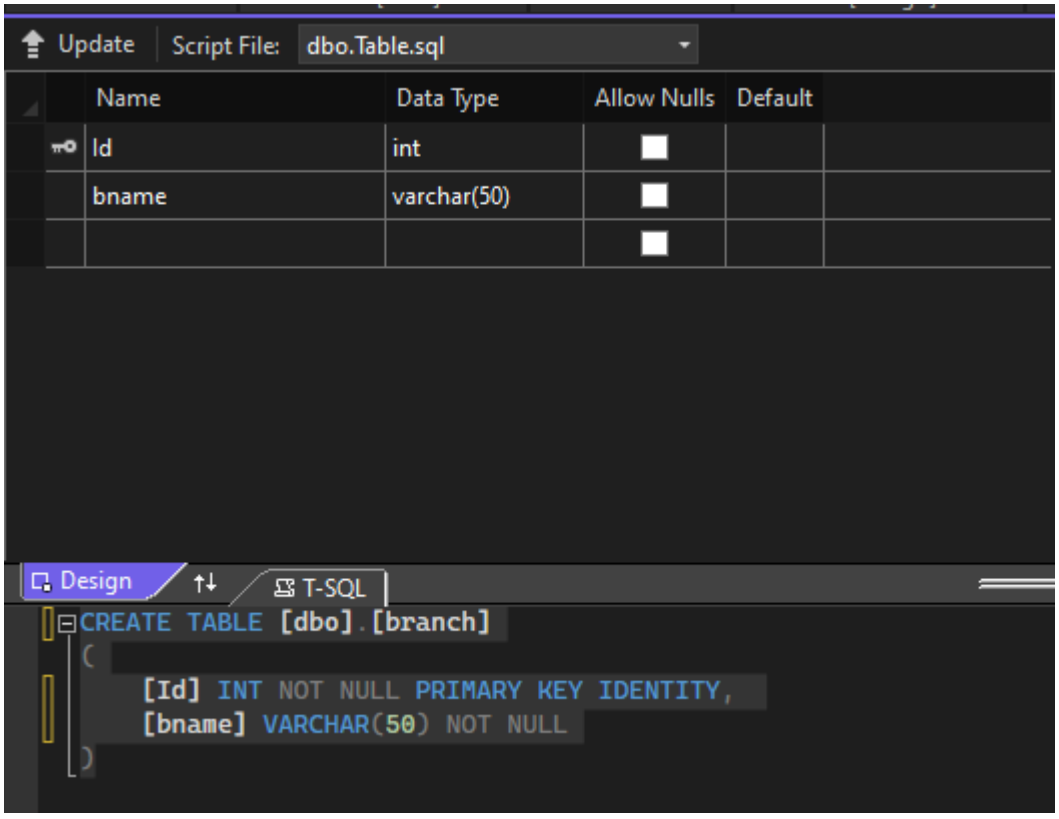




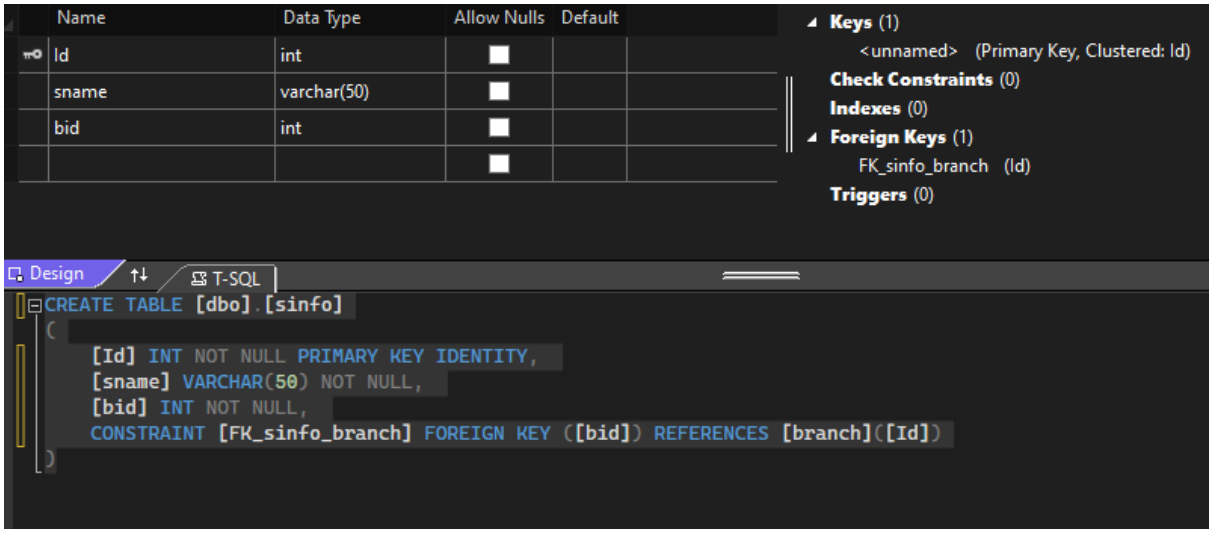
1) Foreign key and combobox (two table joining)







(id ne autoincreament apvu)



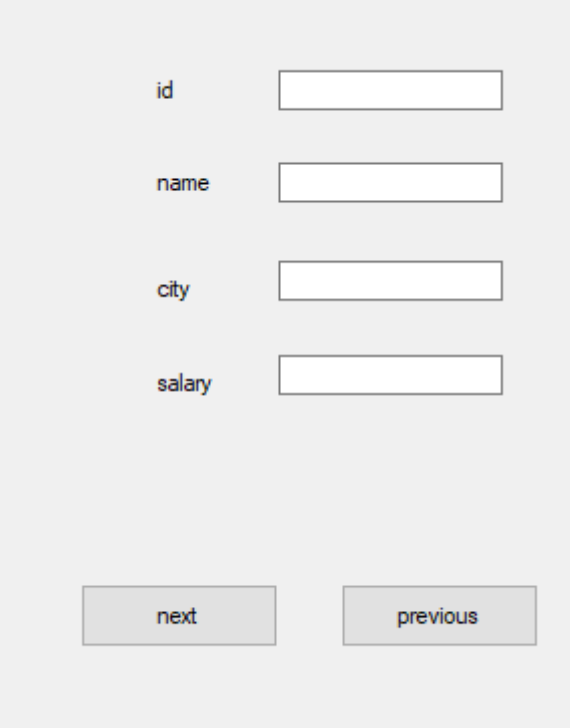
(id ne autoincreament apvu)

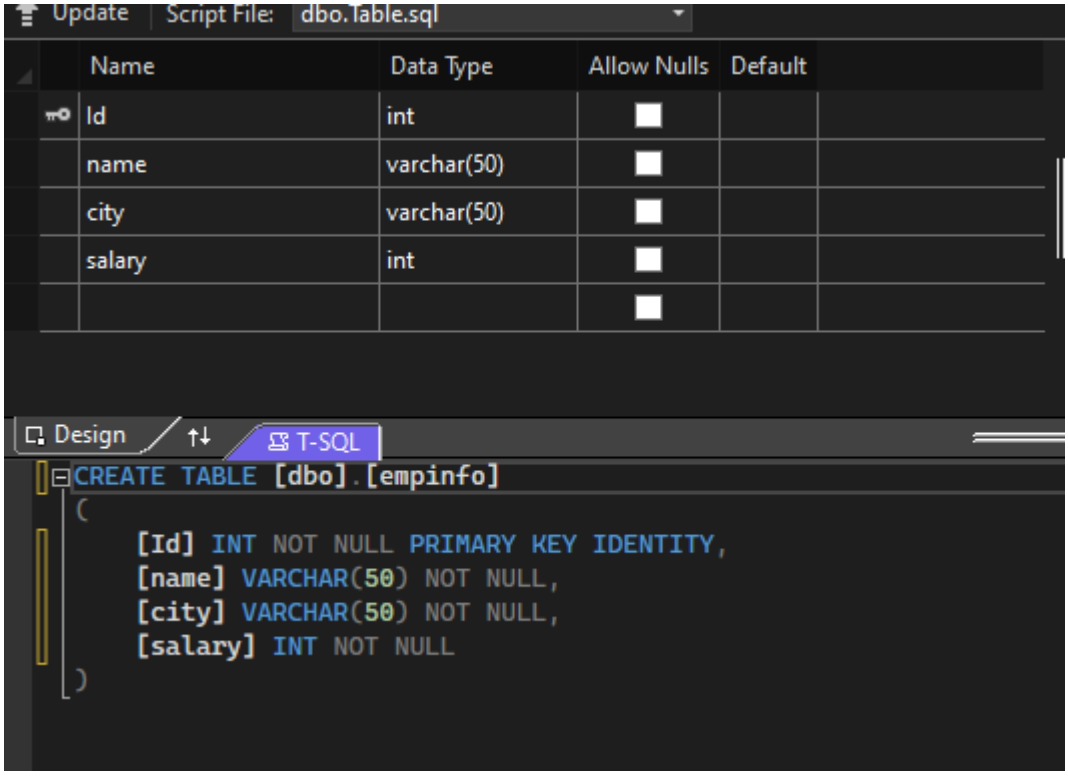
```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using System.Data.SqlClient;
namespace exam2
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
         cfill();
      }
      int id1;

      public void cfill()
      {
         SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Dell\Documents\student.mdf;Integrated
Security=True;Connect Timeout=30");
         string q = "select bname from branch";
         SqlCommand cmd = new SqlCommand(q, con);
         //cmd.Parameters.AddWithValue("@Bname", textBox1_branch.Text);
         con.Open();
         SqlDataReader sdr = cmd.ExecuteReader();
         while (sdr.Read())
         {
```

```
            comboBox1_sinfo.Items.Add(sdr[0].ToString());
        }
        con.Close();
    }
    private void button1_branch_Click(object sender, EventArgs e)
    {
        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Dell\Documents\student.mdf;Integrated
Security=True;Connect Timeout=30");
        String q = "insert into branch values(@bname)";
        SqlCommand cmd = new SqlCommand(q, con);
        cmd.Parameters.AddWithValue("bname", textBox1_bn.Text);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();
    }

    private void button1_sinfo_Click(object sender, EventArgs e)
    {
        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Dell\Documents\student.mdf;Integrated
Security=True;Connect Timeout=30");
        String q = "insert into sinfo values(@sname,@bid)";
        SqlCommand cmd = new SqlCommand(q, con);
        cmd.Parameters.AddWithValue("@sname", textBox1_sinfo.Text);
        cmd.Parameters.AddWithValue("@bid", id1);
        con.Open();
        cmd.ExecuteNonQuery();
        con.Close();


    }

    private void comboBox1_sinfo_SelectedIndexChanged(object sender, EventArgs e)
    {
        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Dell\Documents\student.mdf;Integrated
Security=True;Connect Timeout=30");
        string q = "select id from branch where bname=@bname";
        SqlCommand cmd = new SqlCommand(q, con);
        cmd.Parameters.AddWithValue("@bname", comboBox1_sinfo.SelectedItem.ToString());
        con.Open();
        SqlDataReader sdr = cmd.ExecuteReader();
        sdr.Read();
        id1 = Convert.ToInt32(sdr[0].ToString());
        con.Close();
    }
  }
}
```

	Id	bname
▶	1	MCA
	2	MSCIT
	3	BCA
	4	BSCIT

2) Adapter





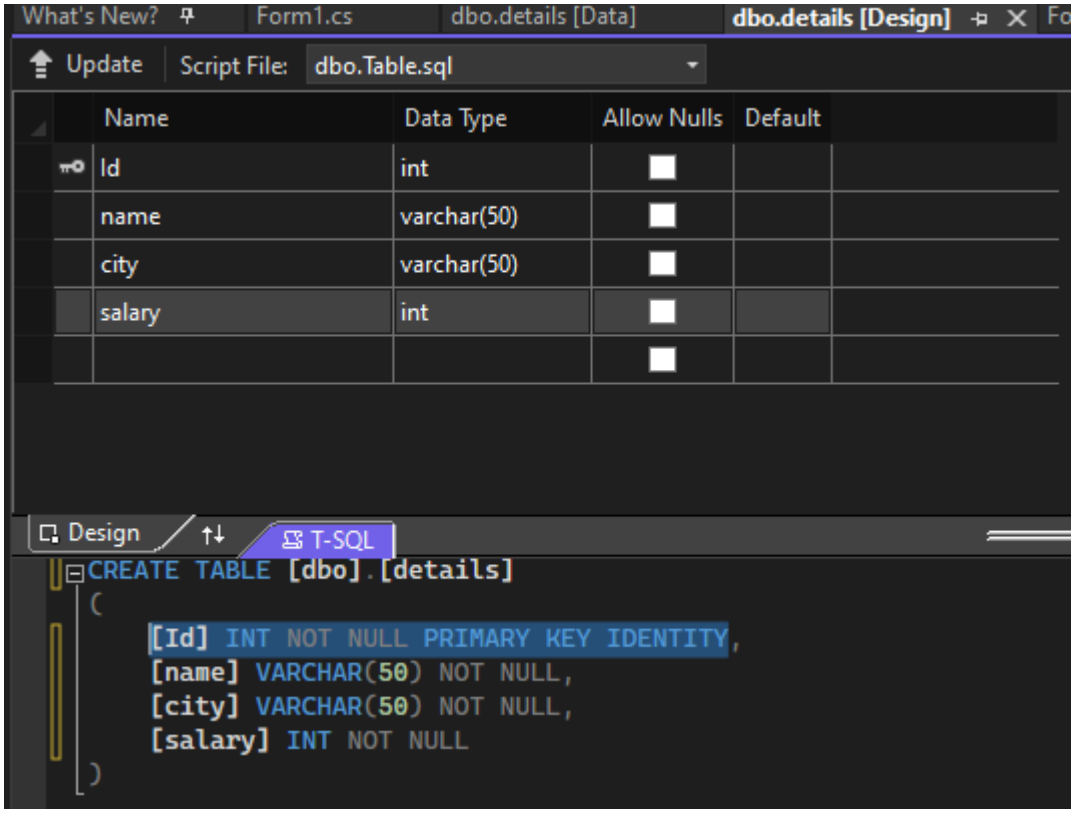

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using System.Data.SqlClient;
namespace adapter
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
         fill();
      }
      int i = 0, j = 0;
      DataSet ds = new DataSet();
      SqlConnection con = new SqlConnection();
      SqlCommand cmd = new SqlCommand();
      SqlDataReader sdr;//read only forward only (don't go to previous)
      SqlDataAdapter sda;//next and previous
```

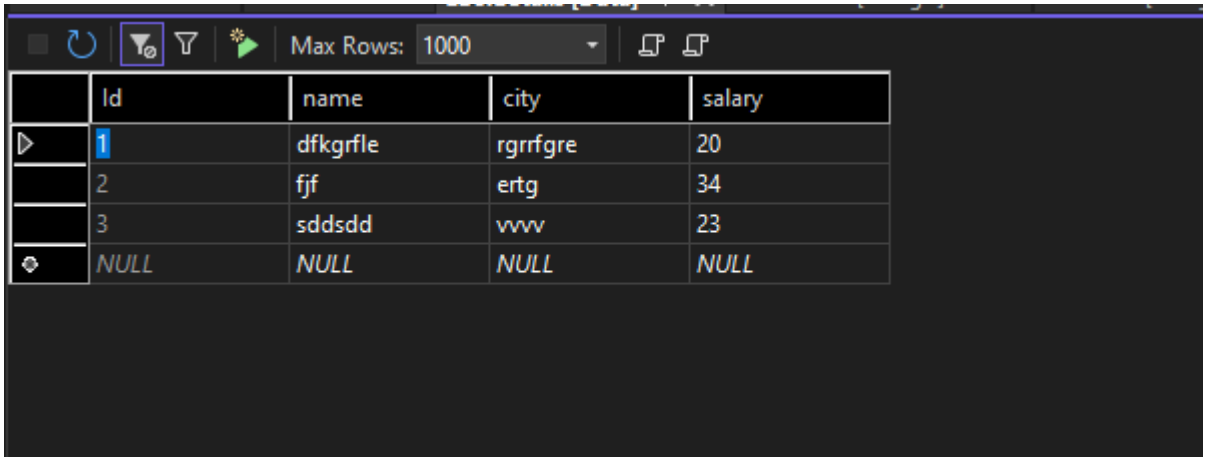
```
        public void fill()
        {
            con.ConnectionString = @"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Dell\Documents\sqldatareaderandadapter.
mdf;Integrated Security=True;Connect Timeout=30";
            //cmd.CommandText = "select * from empInfo";
            //cmd.Connection = con;
            //con.Open();
            //sdr = cmd.ExecuteReader();
            string q = "select * from empinfo";
            sda = new SqlDataAdapter(q, con);
            sda.Fill(ds);
            i = ds.Tables[0].Rows.Count;
        }

        private void button2_prev_Click(object sender, EventArgs e)
        {
            If(j>0)
            j--;
           {
            textBox1_d.Text = ds.Tables[0].Rows[j][0].ToString();
            textBox2_n.Text = ds.Tables[0].Rows[j][1].ToString();
            textBox3_c.Text = ds.Tables[0].Rows[j][2].ToString();
            textBox4_s.Text = ds.Tables[0].Rows[j][3].ToString();
        }
         }

        private void button1_next_Click(object sender, EventArgs e)
        {
            textBox1_d.Text = ds.Tables[0].Rows[j][0].ToString();
            textBox2_n.Text = ds.Tables[0].Rows[j][1].ToString();
            textBox3_c.Text = ds.Tables[0].Rows[j][2].ToString();
            textBox4_s.Text = ds.Tables[0].Rows[j][3].ToString();
            j++;
        }
    }
}
```

(previous button ma pela 'J' aetla mate lakhyu coz last ma next button ma 'J' increament thai jato hato ane ae index pr koi value che nai aetle error ave , so ae error na ave aetle previous button na starting ma 'J' ne decrement kri didho)

2) Reader


id
name
city
salary
next

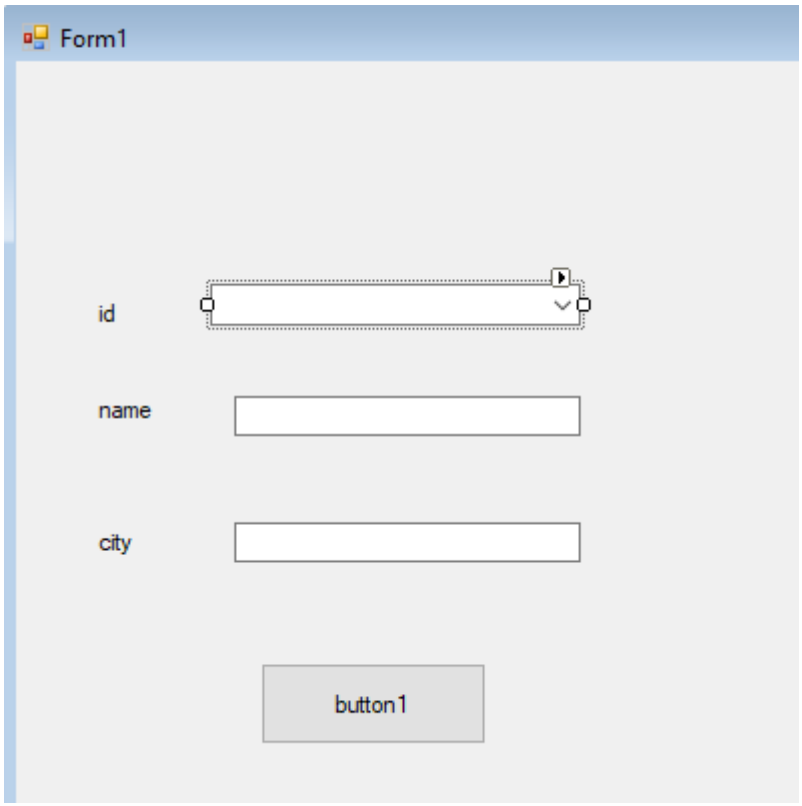

What's New?
Form1.cs
dbo.details [Data]
dbo.details [Design]
Update
Script File:
dbo.Table.sql
Name
Data Type
Allow Nulls
Default
Id
int
name
varchar(50)
city
varchar(50)
salary
int
Design
T-SQL
CREATE TABLE [dbo].[details]
(
[Id] INT NOT NULL PRIMARY KEY IDENTITY,
[name] VARCHAR(50) NOT NULL,
[city] VARCHAR(50) NOT NULL,
[salary] INT NOT NULL
)

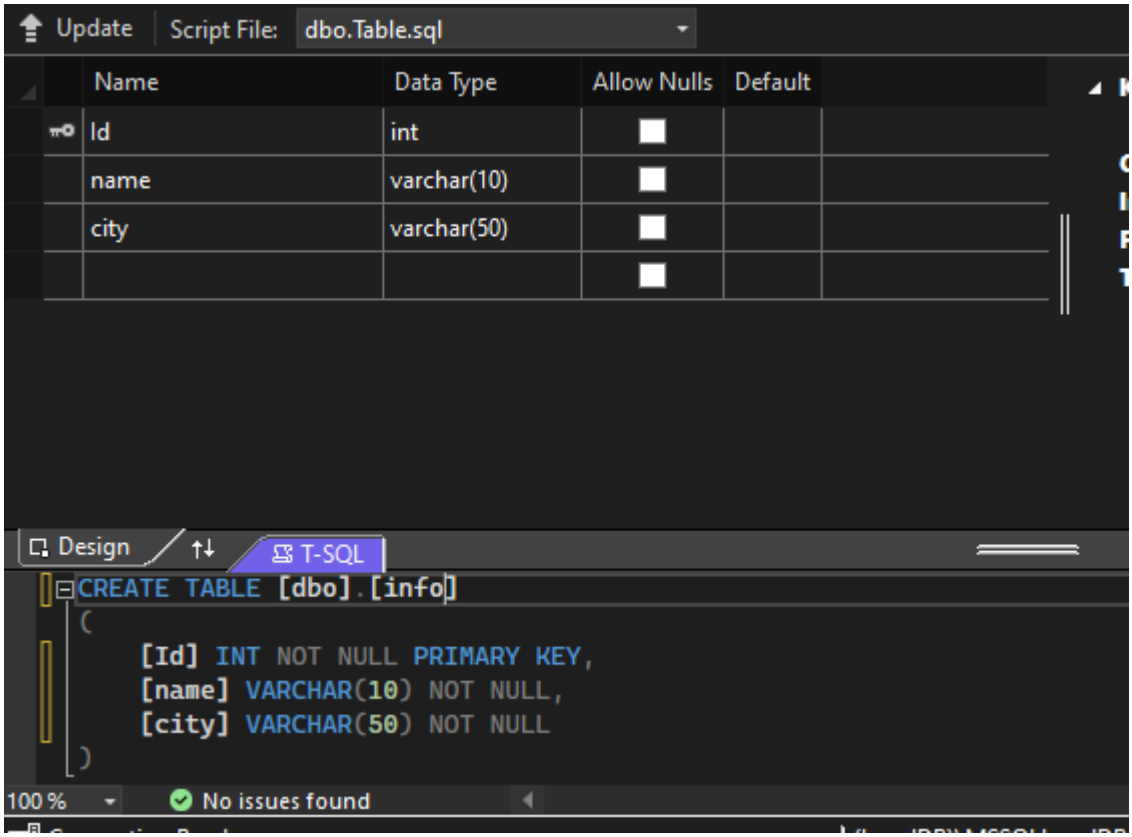



```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using System.Data.SqlClient;
namespace reader
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
         fill();
      }
      SqlConnection con = new SqlConnection();
      SqlCommand cmd = new SqlCommand();
      SqlDataReader sdr;

      public void fill()
      {
         con.ConnectionString = @"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Dell\Documents\reader.mdf;Integrat
ed Security=True;Connect Timeout=30";
         cmd.CommandText = "Select * from details";
         cmd.Connection = con;
         con.Open();
         sdr = cmd.ExecuteReader();
      }

      private void button1_next_Click(object sender, EventArgs e)
      {
         if(sdr.Read())
         {
```

```
            textBox1_id.Text = sdr[0].ToString();
            textBox2_n.Text = sdr[1].ToString();
            textBox3_c.Text = sdr[2].ToString();
            textBox4_s.Text = sdr[3].ToString();
        }
        else
        {
            con.Close();
            MessageBox.Show("no data is available");
        }
    }
  }
}
```

3) Select from combobox id and fill other details in textbox directly(fill data directly)






```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;
using System.Data.SqlClient;
namespace comboboxx
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
         cfill();
      }
      public void cfill()
      {
         comboBox1.Items.Clear();
         SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Dell\Documents\thakgai.mdf;Integrated
Security=True;Connect Timeout=30");
         SqlCommand cmd = new SqlCommand("select id from info", con);
         SqlDataReader sdr;
```

```
            con.Open();
            sdr = cmd.ExecuteReader();
            while(sdr.Read())
            {
                comboBox1.Items.Add(sdr[0].ToString());
            }
            con.Close();
        }

        private void comboBox1_SelectedIndexChanged(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\Dell\Documents\thakgai.mdf;Integrated
Security=True;Connect Timeout=30");
            SqlCommand cmd = new SqlCommand("select name,city from info where id=@id", con);
            SqlDataReader sdr;
            cmd.Parameters.AddWithValue("@id", comboBox1.Text);
            con.Open();
            sdr = cmd.ExecuteReader();
            sdr.Read();
            textBox1_n.Text = sdr[0].ToString();
            textBox2_c.Text = sdr[1].ToString();
            con.Close();
        }
    }
}
```

```
namespace WindowsFormsApp2
{
    public partial class Form7 : Form
    {
        public Form7()
        {
            InitializeComponent();
        }

        private void Form7_Load(object sender, EventArgs e)
        {

        }

        private void label1_Click(object sender, EventArgs e)
        {

        }

        private void button5_Click(object sender, EventArgs e)
        {
```

```
    textBox1.Text = textBox1.Text + ".";
}

private void button1_Click(object sender, EventArgs e)
{

}

private void button14_Click(object sender, EventArgs e)
{

}
float n1,n2,res=0;
string last_ope;

private void btn_equal_Click(object sender, EventArgs e)
{
    n2 = float.Parse(textBox1.Text);
    if(last_ope == "+")
    {
        res = res + n2;
         textBox1.Text=res.ToString();
    }
    else if (last_ope == "-")
    {
        res = res-n2;
        textBox1.Text = res.ToString();
    }
    else if (last_ope == "*")
    {
        res = res * n2;
        textBox1.Text = res.ToString();
    }
    else if (last_ope == "/")
    {
        res = res / n2;
        textBox1.Text = res.ToString();
    }
}

private void btn_clear_Click(object sender, EventArgs e)
{
    textBox1.Text = " ";
    n1 = 0;
    n2 = 0;
    res = 0;
}

private void operand_Click(object sender, EventArgs e)
{
    Button b1 = sender as Button;
```

```
    textBox1.Text = textBox1.Text + b1.Text;
}

private void Operator_Click(object sender, EventArgs e)
{
    n1 = float.Parse(textBox1.Text);
    textBox1.Text = " ";
    Button b1 = (Button)sender;
    last_ope = b1.Text;
    if(last_ope== "")
    {
        res = n1;
    }
    else if(last_ope== "+")
    {
        res = res + n1;
    }
    else if(last_ope== "-")
    {
        if(res==0)
        {
            res = n1 - res;
        }
        else
        {
            res = res - n1;
        }
       // res = n1 - res;
    }
    else if(last_ope == "*")
    {
        if(res==0)
        {
            res = 1;
            res = res * n1;
        }
        else
        {
            res = res * n1;
        }

    }
    else
    {
        if(res==0)
        {
            res = 1;
            res = n1/res;

        }
       else
```

```
            {
                res = res/n1;
            }
        }
    }
}
```

→Normal calculator

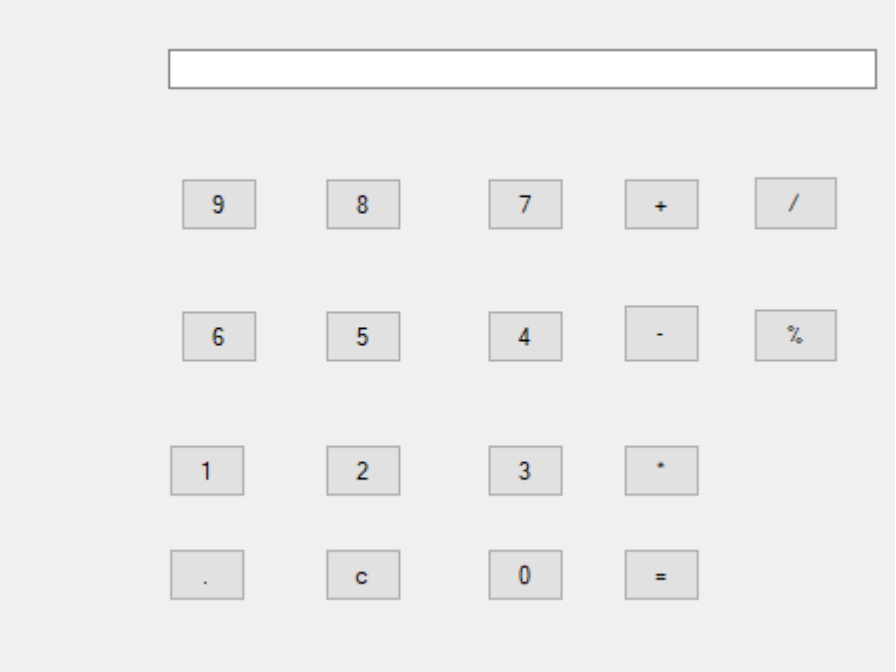
```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace WindowsFormsApp2
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }
        int num1, num2;
        string lastoperator;

        private void btn_equalto_click(object sender, EventArgs e)
        {
            num2 = Convert.ToInt32(textBox1.Text);
            if (lastoperator == "+")
            {
                textBox1.Text = (num1 + num2).ToString();
            }
            else if (lastoperator == "-")
            {
                textBox1.Text = (num1 - num2).ToString();
            }
            else if (lastoperator == "*")
            {
                textBox1.Text = (num1 * num2).ToString();
            }
            else if (lastoperator == "/")
            {
                textBox1.Text = (num1 / num2).ToString();
            }
            else
```

```
            {
                textBox1.Text = (num1 % num2).ToString();
            }
        }
    }



    private void Operand_click(object sender, EventArgs e)
        {
            Button bt = (Button)sender;
            textBox1.Text = textBox1.Text + bt.Text;
        }


        private void operator_click(object sender, EventArgs e)
        {
            num1 = Convert.ToInt32(textBox1.Text);
            textBox1.Text = "";
            Button bt = (Button)sender;
            lastoperator = bt.Text;

        }
    }
}
```

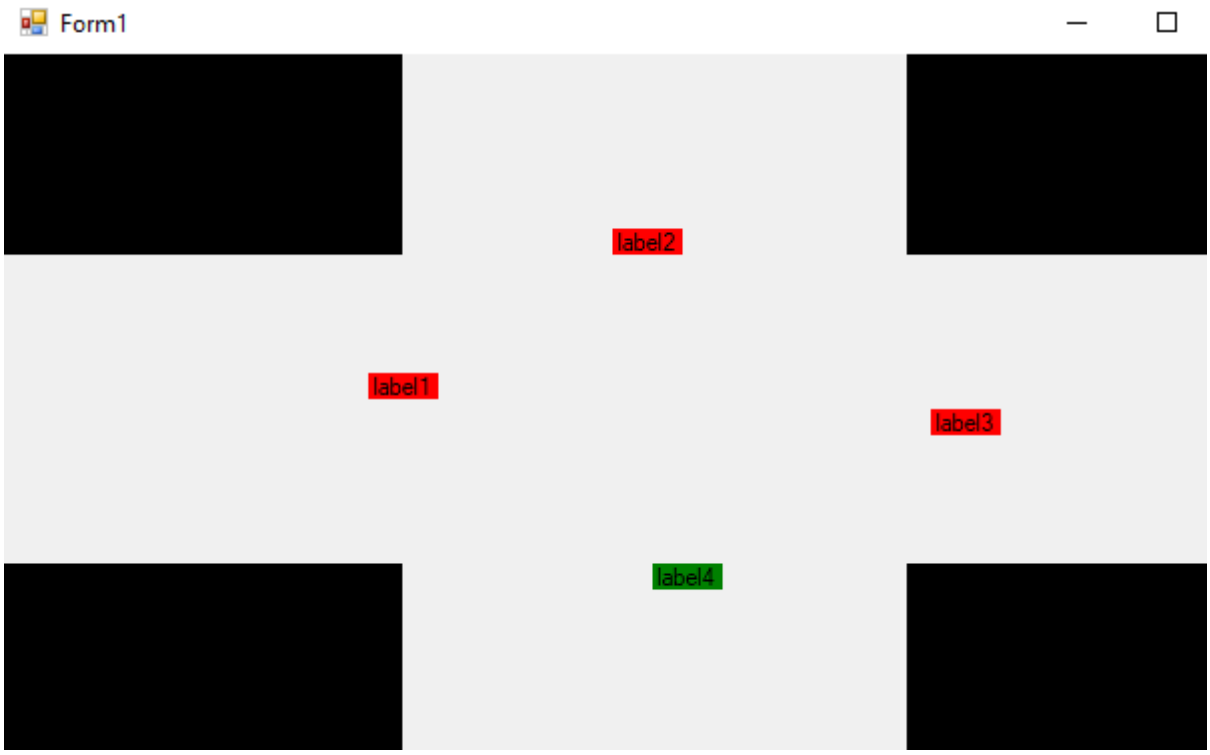
```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace WindowsFormsApp3
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }
        int num1, num2, res;
        string lastoperator;
        private void operand_click(object sender, EventArgs e)
        {
            Button bt = (Button)sender;
            textBox1.Text = textBox1.Text + bt.Text;
        }
```

```
        private void operator_click(object sender, EventArgs e)
        {
            num1 = Convert.ToInt32(textBox1.Text);
            textBox1.Text = "";
            Button bt = (Button)sender;
            lastoperator = bt.Text;
        }

        private void btn_equalto_click(object sender, EventArgs e)
        {
            num2 = Convert.ToInt32(textBox1.Text);
            if(lastoperator == "+")
            {
                textBox1.Text = (num1 + num2).ToString();
            }
            else if(lastoperator == "-")
                {
                  textBox1.Text = (num1 - num2).ToString();
                }
            else if (lastoperator == "*")
            {
                textBox1.Text = (num1 * num2).ToString();
            }
            else if (lastoperator == "/")
            {
                textBox1.Text = (num1 / num2).ToString();
            }
            else
            {
                textBox1.Text = (num1 % num2).ToString();
            }
        }

        private void btn_clear_click(object sender, EventArgs e)
        {
            num1 = 0;
            num2 = 0;
            textBox1.Text = "";
        }
    }
}
```

->(darek operator ne ‘click’ ma ‘operator’ event and operand ne ‘click’ ma ‘operand’ event)



➔ **Traffic signal**




```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
```

```
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace traffic_signal
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
            timer1.Start();
        }

        private void label1_Click(object sender, EventArgs e)
        {




        }
        int count = 0;


        private void timer1_Tick(object sender, EventArgs e)
        {
            if (count == 0)
            {
                label1.BackColor = Color.Green;
                label2.BackColor = Color.Red;
                label3.BackColor = Color.Red;
                label4.BackColor = Color.Red;
                count++;
            }
            else if (count == 1)
            {
                label1.BackColor = Color.Red;
                label2.BackColor = Color.Green;
                label3.BackColor = Color.Red;
                label4.BackColor = Color.Red;
                count++;

            }
            else if (count == 2)
            {
                label1.BackColor = Color.Red;
                label2.BackColor = Color.Red;
                label3.BackColor = Color.Green;
                label4.BackColor = Color.Red;
                count++;

            }
            else
```

```
        {
            label1.BackColor = Color.Red;
            label2.BackColor = Color.Red;
            label3.BackColor = Color.Red;
            label4.BackColor = Color.Green;
            count++;
        }
    }
  }
}
```

➔ Timer traffic signal (picture box)

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace traffic_signal
{
  public partial class Form1 : Form
  {
    public Form1()
    {
      InitializeComponent();
      timer1.Start();
    }

    private void label1_Click(object sender, EventArgs e)
    {




    }
    int count = 0;


    private void timer1_Tick(object sender, EventArgs e)
    {
      if (count == 0)
      {
        label1.BackColor = Color.Green;
        label2.BackColor = Color.Red;
        label3.BackColor = Color.Red;
        label4.BackColor = Color.Red;
        count++;
      }
      else if (count == 1)
```

```
        {
            label1.BackColor = Color.Red;
            label2.BackColor = Color.Green;
            label3.BackColor = Color.Red;
            label4.BackColor = Color.Red;
            count++;

        }
        else if (count == 2)
        {
            label1.BackColor = Color.Red;
            label2.BackColor = Color.Red;
            label3.BackColor = Color.Green;
            label4.BackColor = Color.Red;
            if (label3.BackColor == Color.Green)
            {
                for (int i = 530; i > 12; i--)
                {
                    pictureBox1.Location = new Point(i, 106);
                }
            }
            count++;

        }
        else
        {
            label1.BackColor = Color.Red;
            label2.BackColor = Color.Red;
            label3.BackColor = Color.Red;
            label4.BackColor = Color.Green;
            count++;
        }
    }
  }
}
```

->Timer ma time interval change karvu
Radio button

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace radiobutton
{
```

```
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void radioButton1_red_CheckedChanged(object sender, EventArgs e)
        {
            //radioButton1_red rb = sender as radiobutton_red;
            this.BackColor = Color.FromName(radioButton1_red.Text);
        }

        private void radioButton2_yellow_CheckedChanged(object sender, EventArgs e)
        {
            this.BackColor = Color.FromName(radioButton2_yellow.Text);
        }
    }
}
```

Radio button ,date and time,

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Windows.Forms;

namespace WindowsFormsApplication6
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
            timer1.Start();
```

```
        }



        private void red_CheckedChanged(object sender, EventArgs e)
        {
            RadioButton rb = sender as RadioButton;
            this.BackColor = Color.FromName(rb.Text);
        }

        private void rb_sci_CheckedChanged(object sender, EventArgs e)
        {
            MessageBox.Show("science");
        }

        private void rb_commerce_CheckedChanged(object sender, EventArgs e)
        {
            MessageBox.Show("commerce");
        }

        private void timer1_Tick(object sender, EventArgs e)
        {
            lbl_date.Text = DateTime.Now.ToString();
        }

    }
}
```

Program for add,mul,sub and div.

Code:

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace WinFormsApp2
{
    public partial class Form1 : Form
    {
        public Form1()
        {
```

```
        InitializeComponent();
    }


    private void addbutton_Click(object sender, EventArgs e)
    {
        int num1 = int.Parse(textBox1.Text);
        int num2 = int.Parse(textBox2.Text);
        int result = num1 + num2;
        label4.Text = "Addition is:" + result.ToString();
        label4.Visible = true;
    }

    private void subbutton_Click(object sender, EventArgs e)
    {
        int num1 = int.Parse(textBox1.Text);
        int num2 = int.Parse(textBox2.Text);
        int result = num1 - num2;
        label4.Text = "Subtraction is:" + result.ToString();
        label4.Visible = true;
    }

    private void mulbutton_Click(object sender, EventArgs e)
    {
        int num1 = int.Parse(textBox1.Text);
        int num2 = int.Parse(textBox2.Text);
        int result = num1 * num2;
        label4.Text = "Multiply is:" + result.ToString();
        label4.Visible = true;
    }
```

[11:34] 20BSIT165 HETVI SONI

```
int n, c, sum = 0, temp;
        temp = Convert.ToInt32(textBox1.Text);
        int a = Convert.ToInt32(textBox1.Text);
        while (a>0)
        {
            n = a % 10;
            c = (int)Math.Pow(n, 3);
            sum += c;
            a /= 10;
        }
        if(sum==temp)
        {
            MessageBox.Show("ArmStrong");
```

```
        }
        else
        {
            MessageBox.Show("Not ArmStrong ");
        }
    }



    private void Add_Click(object sender, EventArgs e)
    {

        comboBox1.Items.Add(textBox1.Text);
        MessageBox.Show("Added Succesfully");
    }



    private void Delete_Click(object sender, EventArgs e)
    {
        comboBox1.Items.Remove(comboBox1.SelectedItem.ToString());
        MessageBox.Show("Deleted Succesfully");
    }
```

add and remove from combobox

with armstrong

 # insert update delete

```
using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

using System.Data.SqlClient;
```

```
namespace Assignment_51
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
         cfill();
      }

      SqlConnection conn = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\source\repos\DatabaseDem
o\test_db.mdf;Integrated Security=True;Connect Timeout=30");
      SqlCommand cmd = new SqlCommand();
      SqlDataReader sdr;
      SqlDataAdapter sda;
      DataSet ds = new DataSet();
      int i = 0, j = 0;

      public void cfill()
      {
         //clear the combo box to avoid duplicate records
         comboBox1.Items.Clear();
         SqlConnection conn = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\source\repos\DatabaseDem
o\test_db.mdf;Integrated Security=True;Connect Timeout=30");
         string query = "select id from stud1";
         SqlCommand cmd = new SqlCommand(query, conn);
         SqlDataReader sdr;
         conn.Open();
         sdr = cmd.ExecuteReader();
         while (sdr.Read())
```

```
        {
            //sdr[0] is column index
            comboBox1.Items.Add(sdr[0].ToString());
        }
        conn.Close();
    }
    private void btn_insert_Click(object sender, EventArgs e)
    {
        //take connection string from properties of data connection .mdf file
        SqlConnection conn = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\source\repos\DatabaseDem
o\test_db.mdf;Integrated Security=True;Connect Timeout=30");
        //query to be run (if want to take from control then concat whenever required)
        //(insert into stud values(1,'dev')

        //to auto increment primary key in table definition
        //identity specification->is identity = true
        string query = "insert into stud1
values(@fname,@lname,@city,@country,@course,@semester)";

        //using params
        SqlCommand comm = new SqlCommand(query, conn);
        comm.Parameters.AddWithValue("@fname", txt_FirstName.Text);
        comm.Parameters.AddWithValue("@lname", txt_LastName.Text);
        comm.Parameters.AddWithValue("@city", txt_City.Text);
        comm.Parameters.AddWithValue("@country", txt_Country.Text);
        comm.Parameters.AddWithValue("@course", cb_course.SelectedItem.ToString());
        comm.Parameters.AddWithValue("@semeter", cb_semester.SelectedItem.ToString());
        //open connection
        conn.Open();
        //will return rows affected and is used for dml statements
        int i = comm.ExecuteNonQuery();
```

```
        //close connection
        conn.Close();
        if (i > 0)
        {
            MessageBox.Show("Data inserted successfully");
            //empty the field
            txt_FirstName.Text = txt_LastName.Text = txt_City.Text = txt_Country.Text = "";
        }
        cfill();
    }

    private void btn_update_Click(object sender, EventArgs e)
    {
        SqlConnection conn = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\source\repos\DatabaseDem
o\test_db.mdf;Integrated Security=True;Connect Timeout=30");
        string query = "update stud1 set
fname=@fname,lname=@lname,city=@city,country=@country," +
            "course=@course,@semester  where id=@id";
        SqlCommand comm = new SqlCommand(query, conn);
        comm.Parameters.AddWithValue("@id", Convert.ToInt32(txt_id.Text));
        comm.Parameters.AddWithValue("@fname", txt_FirstName.Text);
        comm.Parameters.AddWithValue("@lname", txt_LastName.Text);
        comm.Parameters.AddWithValue("@city", txt_City.Text);
        comm.Parameters.AddWithValue("@country", txt_Country.Text);
        comm.Parameters.AddWithValue("@course", cb_course.SelectedItem.ToString());
        comm.Parameters.AddWithValue("@semeter", cb_semester.SelectedItem.ToString());
        var x = MessageBox.Show("Are you sure you want to update?", "Update",
MessageBoxButtons.YesNo);
        if (x == DialogResult.Yes)
        {
            conn.Open();
```

```
            //will return rows affected and is used for dml statements(not select)
            int i = comm.ExecuteNonQuery();
            //close connection
            conn.Close();
            if (i > 0)
            {
                MessageBox.Show("Data updated successfully");
                //empty the field
                txt_FirstName.Text = txt_LastName.Text = txt_City.Text = txt_Country.Text = "";
            }
        }
    }

    private void btn_delete_Click(object sender, EventArgs e)
    {
        SqlConnection conn = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\source\repos\DatabaseDem
o\test_db.mdf;Integrated Security=True;Connect Timeout=30");
        string query = "delete from stud1 where id=@id";
        SqlCommand comm = new SqlCommand(query, conn);
        comm.Parameters.AddWithValue("@id", Convert.ToInt32(txt_id.Text));

        //message box to prompt the user to confirm their choice
        var x = MessageBox.Show("Are you sure you want to delete?", "Delete",
MessageBoxButtons.YesNo);
        if (x == DialogResult.Yes)
        {
            conn.Open();
            //will return rows affected and is used for dml statements
            int i = comm.ExecuteNonQuery();
            //close connection
            conn.Close();
```

```
            if (i > 0)
            {
                MessageBox.Show("Data deleted successfully");
                //empty the field
                txt_FirstName.Text = txt_LastName.Text = txt_City.Text = txt_Country.Text = "";
            }
        }

    }

    private void comboBox1_SelectedIndexChanged(object sender, EventArgs e)
    {
        int id1 = Convert.ToInt32(comboBox1.Items[comboBox1.SelectedIndex]);
        SqlConnection conn = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\source\repos\DatabaseDem
o\test_db.mdf;Integrated Security=True;Connect Timeout=30");
        string query = "select * from stud1 where id=@id";
        SqlCommand cmd = new SqlCommand(query, conn);
        cmd.Parameters.AddWithValue("@id", id1);
        SqlDataReader sdr;
        conn.Open();
        sdr = cmd.ExecuteReader();
        while (sdr.Read())
        {
            txt_FirstName.Text = sdr[1].ToString();
            txt_LastName.Text = sdr[2].ToString();
            txt_City.Text = sdr[3].ToString();
            txt_Country.Text = sdr[4].ToString();
            cb_course.SelectedItem = sdr[5].ToString();
            cb_semester.SelectedItem = sdr[6].ToString();
        }
        conn.Close();
```

```
    }

    private void btn_insert_Click_1(object sender, EventArgs e)
    {
        //take connection string from properties of data connection .mdf file
        SqlConnection conn = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\source\repos\DatabaseDem
o\test_db.mdf;Integrated Security=True;Connect Timeout=30");
        //query to be run (if want to take from control then concat whenever required)
        //(insert into stud values(1,'dev')

        // to get course if from course table
        cmd.CommandText = "select id from course where name=@name";
        cmd.Connection = conn;

        cmd.Parameters.AddWithValue("@name", cb_course.SelectedItem.ToString());

        conn.Open();
        sdr = cmd.ExecuteReader();
        sdr.Read();
        int id = Convert.ToInt32(sdr[0]);
        conn.Close();
        //got course id in id

        string query = "insert into stud1
values(@fname,@lname,@city,@country,@course,@semester)";

        //using params
        SqlCommand comm = new SqlCommand(query, conn);
        comm.Parameters.AddWithValue("@fname", txt_FirstName.Text);
        comm.Parameters.AddWithValue("@lname", txt_LastName.Text);
        comm.Parameters.AddWithValue("@city", txt_City.Text);
```

```
        comm.Parameters.AddWithValue("@country", txt_Country.Text);
        comm.Parameters.AddWithValue("@course", id);
        comm.Parameters.AddWithValue("@semester", cb_semester.SelectedItem.ToString());
        //open connection
        conn.Open();
        //will return rows affected and is used for dml statements
        int i = comm.ExecuteNonQuery();
        //close connection
        conn.Close();
        if (i > 0)
        {
            MessageBox.Show("Data inserted successfully");
            //empty the field
            txt_FirstName.Text = txt_LastName.Text = txt_City.Text = txt_Country.Text = "";
        }
        cfill();
    }

    private void btn_update_Click_1(object sender, EventArgs e)
    {
        SqlConnection conn = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\source\repos\DatabaseDem
o\test_db.mdf;Integrated Security=True;Connect Timeout=30");

        // to get course if from course table
        cmd.CommandText = "select id from course where name=@name";
        cmd.Connection = conn;

        cmd.Parameters.AddWithValue("@name", cb_course.SelectedItem.ToString());

        conn.Open();
        sdr = cmd.ExecuteReader();
```

```
        sdr.Read();
        int id = Convert.ToInt32(sdr[0]);
        conn.Close();
        //got course id in id


        string query = "update stud1 set
fname=@fname,lname=@lname,city=@city,country=@country," +
           "course=@course,@semester  where id=@id";
        SqlCommand comm = new SqlCommand(query, conn);
        comm.Parameters.AddWithValue("@id", Convert.ToInt32(txt_id.Text));
        comm.Parameters.AddWithValue("@fname", txt_FirstName.Text);
        comm.Parameters.AddWithValue("@lname", txt_LastName.Text);
        comm.Parameters.AddWithValue("@city", txt_City.Text);
        comm.Parameters.AddWithValue("@country", txt_Country.Text);
        comm.Parameters.AddWithValue("@course", id);
        comm.Parameters.AddWithValue("@semester", cb_semester.SelectedItem.ToString());
        var x = MessageBox.Show("Are you sure you want to update?", "Update",
MessageBoxButtons.YesNo);
        if (x == DialogResult.Yes)
        {
           conn.Open();
           //will return rows affected and is used for dml statements(not select)
           int i = comm.ExecuteNonQuery();
           //close connection
           conn.Close();
           if (i > 0)
           {
              MessageBox.Show("Data updated successfully");
              //empty the field
              txt_FirstName.Text = txt_LastName.Text = txt_City.Text = txt_Country.Text = "";
           }
```

```
        }
    }

    private void btn_delete_Click_1(object sender, EventArgs e)
    {
        SqlConnection conn = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\source\repos\DatabaseDem
o\test_db.mdf;Integrated Security=True;Connect Timeout=30");
        string query = "delete from stud1 where id=@id";
        SqlCommand comm = new SqlCommand(query, conn);
        comm.Parameters.AddWithValue("@id", Convert.ToInt32(txt_id.Text));

        //message box to prompt the user to confirm their choice
        var x = MessageBox.Show("Are you sure you want to delete?", "Delete",
MessageBoxButtons.YesNo);
        if (x == DialogResult.Yes)
        {
            conn.Open();
            //will return rows affected and is used for dml statements
            int i = comm.ExecuteNonQuery();
            //close connection
            conn.Close();
            if (i > 0)
            {
                MessageBox.Show("Data deleted successfully");
                //empty the field
                txt_FirstName.Text = txt_LastName.Text = txt_City.Text = txt_Country.Text = "";
            }
        }
    }

    private void comboBox1_SelectedIndexChanged_1(object sender, EventArgs e)
```

```
    {
        int id1 = Convert.ToInt32(comboBox1.Items[comboBox1.SelectedIndex]);
        SqlConnection conn = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\source\repos\DatabaseDem
o\test_db.mdf;Integrated Security=True;Connect Timeout=30");
        string query = "select * from stud1 where id=@id";
        SqlCommand cmd = new SqlCommand(query, conn);
        cmd.Parameters.AddWithValue("@id", id1);
        SqlDataReader sdr;
        conn.Open();
        sdr = cmd.ExecuteReader();
        while (sdr.Read())
        {
            SqlConnection conn1 = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\source\repos\DatabaseDem
o\test_db.mdf;Integrated Security=True;Connect Timeout=30");
            SqlCommand cmd1 = new SqlCommand("select name from course where id=@id",conn1);
            SqlDataReader sdr1;
            cmd1.Parameters.AddWithValue("@id", Convert.ToInt32(sdr[5]);
            conn1.Open();
            sdr1 = cmd1.ExecuteReader();
            sdr1.Read();
            string cname = sdr1[0].ToString();
            conn1.Close();
            txt_FirstName.Text = sdr[1].ToString();
            txt_LastName.Text = sdr[2].ToString();
            txt_City.Text = sdr[3].ToString();
            txt_Country.Text = sdr[4].ToString();
            cb_course.SelectedItem = cname;
            cb_semester.SelectedItem = sdr[6].ToString();
        }
        conn.Close();
```

```
        }

        private void Form1_Load(object sender, EventArgs e)
        {

        }
    }
}
```

#combobox fill (dev patel)

```
public void cfill()
        {
            //clear the combo box to avoid duplicate records
            comboBox1.Items.Clear();
            SqlConnection conn = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\source\repos\DatabaseDem
o\test_db.mdf;Integrated Security=True;Connect Timeout=30");
            string query = "select id from stud";
            SqlCommand cmd = new SqlCommand(query, conn);
            SqlDataReader sdr;
            conn.Open();
            sdr = cmd.ExecuteReader();
            while(sdr.Read())
            {
                //sdr[0] is column index
                comboBox1.Items.Add(sdr[0].ToString());
            }
            conn.Close();
        }
```

#data grid code (dev pate)

```
DataTable dt = new DataTable();
```

```
        SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\DEV\Documents\ATMdb.mdf;Integra
ted Security=True;Connect Timeout=30");
        string q = "select * from transaction1 where accnum=@accno";
        SqlCommand cmd = new SqlCommand(q, con);
        cmd.Parameters.AddWithValue("@accno", login.AccNo);
        SqlDataAdapter sda = new SqlDataAdapter(cmd);
        sda.Fill(dt);
        grid.DataSource = dt;
```

#hetvi's code

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Data.SqlClient;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace _20bsit165
{
public partial class Form1 : Form
{
public Form1()
{
InitializeComponent();
fill();
fill1();
```

```
cfill();


}
SqlConnection con2 = new SqlConnection();
SqlDataAdapter sda;
DataSet ds = new DataSet();
int i = 0, j = 0;


SqlConnection con1 = new SqlConnection();
SqlCommand cmd1 = new SqlCommand();
SqlDataReader sdr1;
private void label1_Click(object sender, EventArgs e)
{


}


private void btn_insert_Click(object sender, EventArgs e)
{
SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\Documents\20bsit165.mdf;I
ntegrated Security=True;Connect Timeout=30");
string query = "insert into Stu_Info values (@name,@city,@state)";
SqlCommand cmd = new SqlCommand(query, con);
cmd.Parameters.AddWithValue("@name", txt_name.Text);
cmd.Parameters.AddWithValue("@city", txt_city.Text);
cmd.Parameters.AddWithValue("@state", txt_state.Text);
con.Open();
int i = cmd.ExecuteNonQuery();
con.Close();
if (i > 0)
MessageBox.Show("data inserted successfully");
}
```

```
private void btn_update_Click(object sender, EventArgs e)

{

SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\Documents\20bsit165.mdf;I
ntegrated Security=True;Connect Timeout=30");

string query1 = "update Stu_Info set student_city=@city where student_id = @id";

SqlCommand cmd = new SqlCommand(query1, con);

cmd.Parameters.AddWithValue("@city", txt_city.Text);

cmd.Parameters.AddWithValue("@id", Convert.ToInt32(txt_id.Text));

con.Open();

int a = cmd.ExecuteNonQuery();

con.Close();

if (a > 0)

MessageBox.Show("data updated");

}


private void btn_delete_Click(object sender, EventArgs e)

{

SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\Documents\20bsit165.mdf;I
ntegrated Security=True;Connect Timeout=30");

if (DialogResult.Yes == MessageBox.Show("do you want delete ? ", "confirmation ",
MessageBoxButtons.YesNo, MessageBoxIcon.Warning))

{

string query2 = "delete Stu_Info where student_id = @id";

SqlCommand cmd = new SqlCommand(query2, con);

cmd.Parameters.AddWithValue("@id", Convert.ToInt32(txt_id.Text));

con.Open();

int c = cmd.ExecuteNonQuery();

con.Close();

if (c > 0)

MessageBox.Show("record deleted");
```

```
}

}

public void cfill()

{

comboBox1.Items.Clear();

SqlConnection con1 = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\Documents\20bsit165.mdf;I
ntegrated Security=True;Connect Timeout=30");

string query = "select student_id from Stu_Info";

SqlCommand cmd3 = new SqlCommand(query, con1);

con1.Open();

SqlDataReader r = cmd3.ExecuteReader();

while (r.Read())

{

comboBox1.Items.Add(r[0].ToString());

}

con1.Close();

}

public void comfill()

{


SqlConnection con = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\Documents\20bsit165.mdf;I
ntegrated Security=True;Connect Timeout=30");




}

private void Form1_Load(object sender, EventArgs e)

{


}
```

```
private void comboBox1_SelectedIndexChanged(object sender, EventArgs e)
{
SqlConnection con1 = new SqlConnection(@"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\Documents\20bsit165.mdf;I
ntegrated Security=True;Connect Timeout=30");
string query = "select*from Stu_Info where student_id = @id";
SqlCommand cmd = new SqlCommand(query, con1);
con1.Open();
cmd.Parameters.AddWithValue("@id", comboBox1.SelectedItem.ToString());
SqlDataReader r = cmd.ExecuteReader();
while(r.Read())
{
txt_name.Text = r[0].ToString();
txt_city.Text = r[1].ToString();
txt_state.Text = r[2].ToString();
}
}

private void button1_Click(object sender, EventArgs e)
{
//for data read only
//if (sdr1.Read())
//{
// txt_id.Text = sdr1[0].ToString();
// txt_name.Text = sdr1[1].ToString();
// txt_city.Text = sdr1[2].ToString();
// txt_state.Text = sdr1[3].ToString();
//}
//else
//{
// con1.Close();
// fill();
```

```
//}



//for data fill prev and next


if(j<i)
{
txt_id.Text = ds.Tables[0].Rows[j][0].ToString();
txt_name.Text = ds.Tables[0].Rows[j][1].ToString();
txt_city.Text = ds.Tables[0].Rows[j][2].ToString();`            -
txt_state.Text = ds.Tables[0].Rows[j][3].ToString();
j++;
}
}
private void fill()
{
con1.ConnectionString = @"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\Documents\20bsit165.mdf;I
ntegrated Security=True;Connect Timeout=30";
cmd1.CommandText = "select * from Stu_Info";
cmd1.Connection = con1;
con1.Open();
sdr1 = cmd1.ExecuteReader();
}


private void button2_Click(object sender, EventArgs e)
{
if(j>0)
{
j--;
txt_id.Text = ds.Tables[0].Rows[j][0].ToString();
txt_name.Text = ds.Tables[0].Rows[j][1].ToString();
```

```
txt_city.Text = ds.Tables[0].Rows[j][2].ToString();

txt_state.Text = ds.Tables[0].Rows[j][3].ToString();


}

}


private void fill1()

{

con2.ConnectionString = @"Data
Source=(LocalDB)\MSSQLLocalDB;AttachDbFilename=C:\Users\student\Documents\20bsit165.mdf;I
ntegrated Security=True;Connect Timeout=30";

sda = new SqlDataAdapter("select * from Stu_Info", con2);


sda.Fill(ds);

i = ds.Tables[0].Rows.Count;


}

}

}
```