

## Form1.cs

```
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;

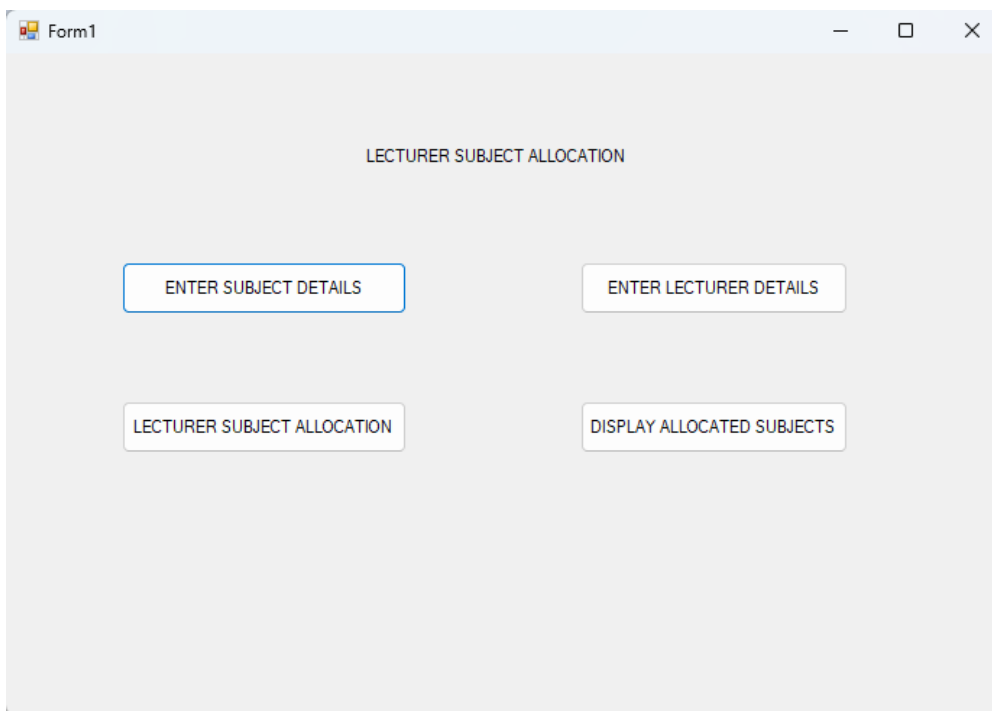
namespace partbprg2
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            new Form2().Show();
            this.Hide();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            new Form3().Show();
            this.Hide();
        }

        private void button3_Click(object sender, EventArgs e)
        {
            new Form4().Show();
            this.Hide();
        }

        private void button4_Click(object sender, EventArgs e)
        {
            new Form5().Show();
            this.Hide();
        }
    }
}
```



The screenshot shows a Windows application window titled "Form1". The window has a standard Windows title bar with minimize, maximize, and close buttons. The main content area has a light gray background and is titled "LECTURER SUBJECT ALLOCATION" in the center. Below the title, there are four buttons arranged in a 2x2 grid. The top-left button is labeled "ENTER SUBJECT DETAILS", the top-right button is labeled "ENTER LECTURER DETAILS", the bottom-left button is labeled "LECTURER SUBJECT ALLOCATION", and the bottom-right button is labeled "DISPLAY ALLOCATED SUBJECTS". All buttons have a white background and a thin gray border.

## Form2.cs

```
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;
using System.Data.SqlClient;

namespace partbprg2
{
    public partial class Form2 : Form
    {
        public Form2()
        {
            InitializeComponent();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            SqlConnection conn = new SqlConnection("Data Source=mca01-17\\sqlexpress;Initial
            Catalog=db_LSA2;Integrated Security=True");

            conn.Open();

            SqlCommand cmd = new SqlCommand("insert into tbl_Subjects values(" + textBox1.Text +
            "','" + textBox2.Text + "','" + textBox3.Text + "')", conn);
            cmd.ExecuteNonQuery();

            MessageBox.Show("Subject Details Entered Successfully");

            textBox1.Text = "";
            textBox2.Text = "";
            textBox3.Text = "";
            textBox1.Focus();

            conn.Close();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            new Form1().Show();
            this.Hide();
        }
    }
}
```

Form2

ENTER NEW SUBJECT DETAILS

Subject ID: 7

Subject Code: 107

Subject Name: DSA

Back Save

Subject Details Entered Successfully

OK

## Form3.cs

```
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;
using System.Data.SqlClient;

namespace partbprg2
{
    public partial class Form3 : Form
    {
        public Form3()
        {
            InitializeComponent();
        }

        private void button2_Click(object sender, EventArgs e)
        {
            new Form1().Show();
            this.Hide();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            SqlConnection conn = new SqlConnection("Data Source=mca01-17\\sqlexpress;Initial
            Catalog=db_LSA2;Integrated Security=True");

            conn.Open();

            SqlCommand cmd = new SqlCommand("insert into tbl_Lecturers values(" + textBox1.Text +
            ", '" + textBox2.Text + "', '" + textBox3.Text + "')", conn);
            cmd.ExecuteNonQuery();

            MessageBox.Show("Lecturer Details Entered Successfully");

            textBox1.Text = "";
            textBox2.Text = "";
            textBox3.Text = "";
            textBox1.Focus();

            conn.Close();
        }
    }
}
```

The screenshot displays the 'Form3' application window titled 'ENTER LECTURER DETAILS'. It contains three text input fields: 'Lecturer ID' with the value '1006', 'Lecturer Name' with the value 'Gururaj', and 'Contact Number' with the value '8877665544'. Below these fields are two buttons: 'Back' and 'Save'. A modal message box is overlaid on the main window, displaying the text 'Lecturer Details Entered Successfully' and an 'OK' button. The message box has a close button (X) in its top right corner.

## Form4.cs

```
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;
using System.Data.SqlClient;

namespace partbprg2
{
    public partial class Form4 : Form
    {
        public Form4()
        {
            InitializeComponent();

            private void Form4_Load(object sender, EventArgs e)
            {
                SqlConnection con = new SqlConnection("Data Source=mca01-17\\sqlexpress;Initial
                Catalog=db_LSA2;Integrated Security=True;Pooling=False");
                con.Open();
                SqlDataAdapter da = new SqlDataAdapter("select LecturerName from tbl_Lecturers", con);
                DataTable dt = new DataTable();
                da.Fill(dt);
                comboBox1.DataSource = dt;
                comboBox1.DisplayMember = "LecturerName";
                comboBox1.ValueMember = "LecturerName";
                da = new SqlDataAdapter("select * from tbl_Subjects", con);
                dt = new DataTable();
                da.Fill(dt);
                dataGridView1.DataSource = dt;
                DataGridViewCheckBoxColumn c = new DataGridViewCheckBoxColumn();
                c.Name = "Check";
                c.Width = 50;
                dataGridView1.Columns.Insert(0, c);
                con.Close();
            }

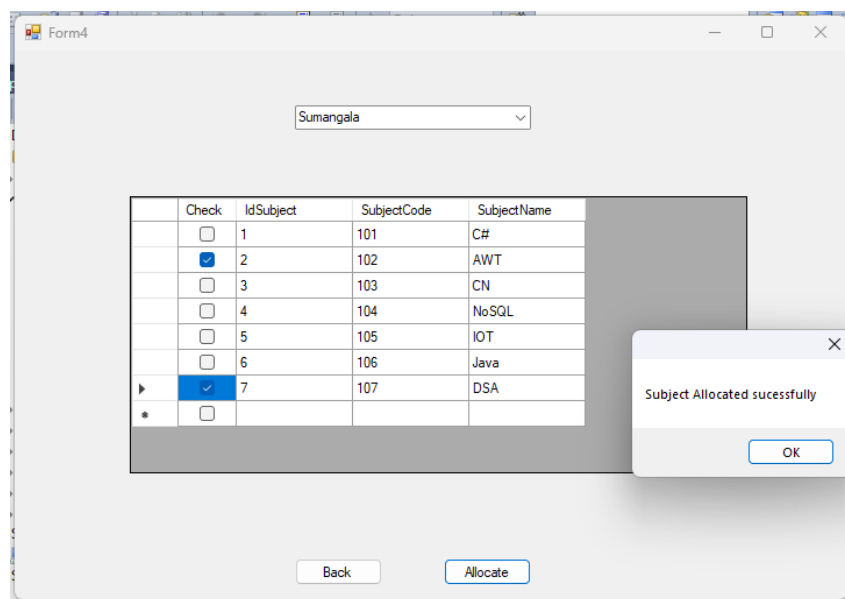
            private void button1_Click(object sender, EventArgs e)
            {
                SqlConnection con = new SqlConnection("Data Source=mca01-17\\sqlexpress;Initial
                Catalog=db_LSA2;Integrated Security=True;Pooling=False");
                con.Open();
                SqlDataAdapter da = new SqlDataAdapter("select IdLecturer from tbl_Lecturers where
                LecturerName='" + comboBox1.SelectedValue.ToString() + "'", con);
                DataTable dt = new DataTable();
                da.Fill(dt);
                foreach (DataGridViewRow r in dataGridView1.Rows)
                {
                    if (Convert.ToBoolean(r.Cells["Check"].Value))
                    {
                        SqlCommand cmd = new SqlCommand("insert into tbl_LecturerSubjects
                        values(@sid,@score,@lid)", con);
                        cmd.Parameters.AddWithValue("@sid", r.Cells["IdSubject"].Value);
                        cmd.Parameters.AddWithValue("@score", r.Cells["SubjectCode"].Value);
                    }
                }
            }
        }
    }
}
```

```

        cmd.Parameters.AddWithValue("@lid", int.Parse(dt.Rows[0][0].ToString()));
        cmd.ExecuteNonQuery();
    }
}
MessageBox.Show("Subject Allocated sucessfully");
con.Close();
}

private void button2_Click(object sender, EventArgs e)
{
    new Form1().Show();
    this.Hide();
}
}
}

```



## Form5.cs

```

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;
using System.Data.SqlClient;

namespace partbprg2
{
    public partial class Form5 : Form
    {
        public Form5()
        {
            InitializeComponent();
        }

        private void button2_Click(object sender, EventArgs e)
        {

```

```

    }

    private void Form5_Load(object sender, EventArgs e)
    {
        SqlConnection con = new SqlConnection("Data Source=mca01-17\\sqlexpress;Initial
        Catalog=db_LSA2;Integrated Security=True;Pooling=False");
        con.Open();
        SqlDataAdapter da = new SqlDataAdapter("select LecturerName from tbl_Lecturers", con);
        DataTable dt = new DataTable();
        da.Fill(dt);
        comboBox1.DataSource = dt;
        comboBox1.DisplayMember = "LecturerName";
        comboBox1.ValueMember = "LecturerName";
        con.Close();
    }

    private void comboBox1_SelectedIndexChanged(object sender, EventArgs e)
    {
        SqlConnection con = new SqlConnection("Data Source=mca01-17\\sqlexpress;Initial
        Catalog=db_LSA2;Integrated Security=True;Pooling=False");
        con.Open();
        SqlDataAdapter da = new SqlDataAdapter("select a.IdSubject, a.SubjectCode, a.SubjectName
        from tbl_Subjects a, tbl_Lecturers b, tbl_LecturerSubjects c where a.IdSubject = c.IdSubject AND
        b.IdLecturer = c.IdLecturer AND b.LecturerName = '"+comboBox1.SelectedValue.ToString()+"'", con);
        DataTable dt = new DataTable();
        da.Fill(dt);
        dataGridView1.DataSource = dt;
        con.Close();
    }

    private void button1_Click(object sender, EventArgs e)
    {
        new Form1().Show();
        this.Hide();
    }
}
}

```

The screenshot shows a Windows application window titled "Form5". At the top, there is a dropdown menu with the text "Sumangala" and a downward arrow. Below the dropdown is a data grid with three columns: "IdSubject", "SubjectCode", and "SubjectName". The grid contains three rows of data:

	IdSubject	SubjectCode	SubjectName
▶	1	101	C#
	2	102	AWT
	7	107	DSA

At the bottom of the window, there are two buttons: "Back" and "Display".

## Database:

The screenshot shows the SQL Server Enterprise Manager interface. On the left, the 'Server Explorer' pane displays the database structure for 'mca01-17\sqlexpress.db\_LSA2.dbo'. The 'tbl\_Lecturers' table is selected, showing its columns: IdLecturer, LecturerName, and ContactNumber. The main pane displays the data for 'tbl\_Lecturers: Quer...sqlexpress.db\_LSA2)'. The data is as follows:

IdLecturer	LecturerName	ContactNumber
1001	Sumangala	9988776655
1002	Hareesh	8877665544
1003	Rakshitha	7766554433
1004	Priya	6655443322
1005	Murari	5544332211
NULL	NULL	NULL

The screenshot shows the SQL Server Enterprise Manager interface. On the left, the 'Server Explorer' pane displays the database structure for 'mca01-17\sqlexpress.db\_LSA2.dbo'. The 'tbl\_LecturerSubjects' table is selected, showing its columns: IdSubject, SubjectCode, and IdLecturer. The main pane displays the data for 'tbl\_LecturerSubjec...sqlexpress.db\_LSA2)'. The data is as follows:

IdSubject	SubjectCode	IdLecturer
1	101	1001
2	102	1002
3	103	1003
4	104	1004
5	105	1005
3	103	1005
5	105	1005
2	102	1001
7	107	1001
NULL	NULL	NULL

The screenshot shows the SQL Server Enterprise Manager interface. On the left, the 'Server Explorer' pane displays the database structure for 'mca01-17\sqlexpress.db\_LSA2.dbo'. The 'tbl\_Subjects' table is selected, showing its columns: IdSubject, SubjectCode, and SubjectName. The main pane displays the data for 'tbl\_Subjects: Quer...sqlexpress.db\_LSA2)'. The data is as follows:

IdSubject	SubjectCode	SubjectName
1	101	C#
2	102	AWT
3	103	CN
4	104	NoSQL
5	105	IOT
6	106	Java
7	107	DSA
NULL	NULL	NULL