

Form 1.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 prg1partb
{
    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();
        }

        private void dataGridView1_CellContentClick(object sender, DataGridViewCellEventArgs e)
        {
        }

        private void button5_Click(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection("Data Source=mca01-17\\sqlexpress;Initial
Catalog=db_EMS2;Integrated Security=True;Pooling=False");
            con.Open();

            string query = "SELECT * FROM tbl_EmployeeDetails";

            SqlDataAdapter da = new SqlDataAdapter(query, con);
            DataTable dt = new DataTable();
            da.Fill(dt);

            dataGridView1.DataSource = dt;

            con.Close();
        }
    }
}
```

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 prg1partb
{
    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_EMS2;Integrated Security=True;Pooling=False");

                conn.Open();

                SqlCommand cmd = new SqlCommand("insert into tbl_EmployeeDetails
values("+textBox1.Text+", '"+textBox2.Text+"', '"+textBox3.Text+"', '"+textBox4.Text+"', '"+textBox5.Tex
t+"')", conn);
                cmd.ExecuteNonQuery();

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

                textBox1.Text = "";
                textBox2.Text = "";
                textBox3.Text = "";
                textBox4.Text = "";
                textBox5.Text = "";
                textBox1.Focus();

                conn.Close();

            }

            private void textBox1_TextChanged(object sender, EventArgs e)
            {
            }

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

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 prg1partb
{
    public partial class Form3 : Form
    {
        public Form3()
        {
            InitializeComponent();

            private void button1_Click(object sender, EventArgs e)
            {
                SqlConnection con = new SqlConnection("Data Source=mca01-17\\sqlexpress;Initial
                Catalog=db_EMS2;Integrated Security=True;Pooling=False");

                con.Open();
                SqlDataAdapter da = new SqlDataAdapter("SELECT * FROM tbl_EmployeeDetails WHERE
                IdReportingTo = (SELECT IdEmployee FROM tbl_EmployeeDetails WHERE EmployeeName = '" +
                comboBox1.SelectedValue.ToString() + "')", con);

                DataTable dt = new DataTable();
                da.Fill(dt);

                dataGridView1.DataSource = dt;

                con.Close();
            }

            private void Form3_Load(object sender, EventArgs e)
            {
                SqlConnection con = new SqlConnection("Data Source=mca01-17\\sqlexpress;Initial
                Catalog=db_EMS2;Integrated Security=True;Pooling=False");
                con.Open();

                SqlDataAdapter da = new SqlDataAdapter("SELECT EmployeeName FROM tbl_EmployeeDetails
                WHERE IdDesignation = 1", con);
                DataTable dt = new DataTable();
                da.Fill(dt);

                comboBox1.DataSource = dt;
                comboBox1.DisplayMember = "EmployeeName";
                comboBox1.ValueMember = "EmployeeName";

                con.Close();
            }

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

```

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 prg1partb
{
    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_EMS2;Integrated Security=True;Pooling=False");
                con.Open();

                SqlDataAdapter da = new SqlDataAdapter("SELECT EmployeeName FROM tbl_EmployeeDetails
WHERE IdDesignation = 2", con);
                DataTable dt = new DataTable();
                da.Fill(dt);

                comboBox1.DataSource = dt;
                comboBox1.DisplayMember = "EmployeeName";
                comboBox1.ValueMember = "EmployeeName";

                con.Close();
            }

            private void button1_Click(object sender, EventArgs e)
            {
                SqlConnection con = new SqlConnection("Data Source=mca01-17\\sqlexpress;Initial
Catalog=db_EMS2;Integrated Security=True;Pooling=False");
                con.Open();

                SqlDataAdapter da = new SqlDataAdapter("SELECT * FROM tbl_EmployeeDetails WHERE
IdReportingTo = (SELECT IdEmployee FROM tbl_EmployeeDetails WHERE EmployeeName = '" +
comboBox1.SelectedValue.ToString() + "')", con);

                DataTable dt = new DataTable();
                da.Fill(dt);

                dataGridView1.DataSource = dt;

                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 prg1partb
{
    public partial class Form5 : Form
    {
        public Form5()
        {
            InitializeComponent();

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

            private void Form5_Load(object sender, EventArgs e)
            {
                SqlConnection con = new SqlConnection("Data Source=mca01-17\\sqlexpress;Initial
Catalog=db_EMS2;Integrated Security=True;Pooling=False");
                con.Open();

                string query = "SELECT a.IdEmployee, a.EmployeeName, a.ContactNumber, a.IdDesignation,
a.IdReportingTo, b.EmployeeName AS ManagerName FROM tbl_EmployeeDetails a, tbl_EmployeeDetails b
WHERE a.IdReportingTo = b.IdEmployee;";

                SqlDataAdapter da = new SqlDataAdapter(query, con);
                DataTable dt = new DataTable();
                da.Fill(dt);

                dataGridView1.DataSource = dt;

                con.Close();
            }

            private void label1_Click(object sender, EventArgs e)
            {
            }
        }
    }
}

```

IdEmployee	EmployeeName	ContactNumber	IdDesignation	IdReportingTo
101	Preetham	9988776655	1	0
102	Dsilva	9966554433	2	101
103	Jeffson	6789453456	3	102
104	Joy	8878564936	1	0
105	james	7845079832	2	104
106	Karthik	6677889900	3	102
108	Jeevan	8899776655	3	105
109	aPT	8899774433	1	0

Employee ID: 110

Employee Name: jeff

Contact: 7788996655

Designation ID: 3

Reporting ID: 105

Back Save

The screenshot shows the SQL Server Enterprise Manager interface. On the left, the 'Servers' folder is expanded, showing the 'msdb' database. The 'tbl_EmployeeDetails' table is selected. The 'Table Designer' tab is active, showing the table structure. The table has two columns: 'IdDesignation' (int) and 'Designation' (varchar(50)). The 'IdDesignation' column is highlighted. The 'Table Designer' tab is also visible, showing the table structure.

Column Name	Data Type	Allow Nulls
IdDesignation	int	<input type="checkbox"/>
Designation	varchar(50)	<input type="checkbox"/>

Column Properties

(General)

(Name)	IdDesignation
Allow Nulls	No
Data Type	int
Default Value or Binding	

(Table Designer)

(General)

Form5

Employee details with their reporting manager

	IdEmployee	EmployeeName	ContactNumber	IdDesignation
▶	102	Dsilva	9966554433	2
	103	Jeffson	6789453456	3
	105	james	7845079832	2
	106	Karthik	6677889900	3
	108	Jeevan	8899776655	3
	110	jeff	7788996655	3
*				

Back

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the 'Server Explorer' pane shows the hierarchy: 'Data Connections' > 'mca01-17\sqlpress.db_EMS2.dbo' > 'Database Diagrams' > 'Tables' > 'tbl_Designations' > 'tbl_EmployeeDetails'. The 'tbl_EmployeeDetails' table is selected, and its structure is shown in the main pane. The table has the following columns:

Column Name	Data Type	Allow Nulls
IdEmployee	int	<input type="checkbox"/>
EmployeeName	varchar(50)	<input type="checkbox"/>
ContactNumber	varchar(50)	<input type="checkbox"/>
IdDesignation	int	<input type="checkbox"/>
IdReportingTo	int	<input checked="" type="checkbox"/>

Below the table structure, the 'Column Properties' pane is visible, showing the 'General' tab for the 'IdEmployee' column. The properties are:

Property	Value
(Name)	IdEmployee
Allow Nulls	No
Data Type	int
Default Value or Binding	