

List of Exercises

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Ex. No. 1	Inheritance		
Date of Exercise	14.07.2017	Date of Upload	13.08.2017

Aim

Design and develop an employee management application using C#.Net with the appropriate use of inheritance and the concepts involved along with that. Application should provide types of logins such as Admin and Employee. The functionalities for each user type and the application constraints are given below.

Admin

- Create and manage the Employees.
- View the Employee details
- Generate Salary details
- List Employee by department

Employee

- View Profile
- View Salary Details
- Edit Profile

Youtube Link

<https://www.youtube.com/watch?v=a1jJ9ZRktyg>

Description

Implementation inheritance – a derived type adopts the base type’s implementation of each function.

Interface inheritance – inherits only the signatures of the functions and does not inherit any implementations.

Abstract Classes - An abstract class cannot be instantiated

Sealed Classes - Sealed class, can’t be inherit.

Hiding Methods - If a method with the same signature is declared in both base and derived classes, but the methods are not declared as virtual and override, respectively, then the derived class version is said to *hide the* base class version.

Program

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Exp_1
{
    class Employee
    {
        protected string name;

        protected float salary;

        public string type;

        public int empid;

        public Employee()
```

```
{
    Console.WriteLine("Name:");
    name = Console.ReadLine();
    Console.WriteLine("Empi ID");
    empid = int.Parse(Console.ReadLine());
}

public void view_sal()
{
    Console.WriteLine("Name:{1}    Salary: {0}", salary, name);
}

public virtual int idd()
{
    return empid;
}
}

public interface salcal
{
    float sal(int day);
}

class Teaching : Employee, salcal
{
    public Teaching(string t)
```

```
{
    type = t;
    salary = this.sal(30);
}

public float sal(int day)
{
    return day * 3600;
}

public void views()
{
    Console.WriteLine("Name: {0}", name);
    Console.WriteLine("ID: {0}", empid);
    Console.WriteLine("Salary: {0}", salary);
}

public override int idd()
{
    return empid;
}
}

class Non : Employee, salcal
{
    public Non(string t)
```

```
{
    type = t;
    salary = this.sal(30);
}

public float sal(int day)
{
    return day * 2000;
}

public void views()
{
    Console.WriteLine("Name: {0}", name);
    Console.WriteLine("ID: {0}", empid);
    Console.WriteLine("Salary: {0}", salary);
}
}

class Program
{
    static void Main(string[] args)
    {
        int choice, i = 0, j = 0;

        Teaching[] t = new Teaching[10];
        Non[] n = new Non[10];
```

```
do
{
    Console.WriteLine("1. Create a employee");
    Console.WriteLine("2. View Employee details");
    Console.WriteLine("3. Generate Salary details");
    Console.WriteLine("4. List Employees");
    Console.WriteLine("5. Not an admin");
    Console.WriteLine("Enter Your choice");
    choice = int.Parse(Console.ReadLine());
    switch (choice)
    {
        case 1:
            int ch;
            Console.WriteLine("1. Teaching");
            Console.WriteLine("2. Non Teaching");
            ch = int.Parse(Console.ReadLine());
            switch (ch)
            {
                case 1:
                    t[i] = new Teaching("teaching");
                    i++;
                    break;
```

case 2:

n[j] = new Non("non teaching");

j++;

break;

default:

Console.WriteLine("Wrong choice");

break;

}

break;

case 2:

int ch1;

Console.WriteLine("1. Teaching");

Console.WriteLine("2. Non Teaching");

ch1 = int.Parse(Console.ReadLine());

switch (ch1)

{

case 1:

for (int x = 0; x < i; x++)

t[x].views();

break;

case 2:

for (int x = 0; x < j; x++)


```
        n[x].views();  
        break;  
    }  
    break;  
case 3:  
    int ch2;  
    Console.WriteLine("1. Teaching");  
    Console.WriteLine("2. Non Teaching");  
    ch2 = int.Parse(Console.ReadLine());  
    switch (ch2)  
    {  
        case 1:  
            for (int x = 0; x < i; x++)  
                t[x].view_sal();  
            break;  
        case 2:  
            for (int x = 0; x < j; x++)  
                n[x].view_sal();  
            break;  
    }  
    break;  
case 4:
```

```
        Console.WriteLine("1. Teaching");

        for (int x = 0; x < i; x++)

            t[x].views();

        Console.WriteLine("2. Non Teaching");

        for (int x = 0; x < j; x++)

            n[x].views();

        break;

case 5:

    int ch5;

    Console.WriteLine("1. Teaching");

    Console.WriteLine("2. Non Teaching");

    ch2 = int.Parse(Console.ReadLine());

    int empid;

    Console.WriteLine("Emp id:");

    empid = int.Parse(Console.ReadLine());

    switch (ch2)

    {

        case 1:

            for (int x = 0; x < i; x++)

                if (empid == t[x].idd())

                    t[x].views();

            break;
```

case 2:

```
        for (int x = 0; x < j; x++)  
            if (empid == n[x].idd())  
                n[x].views();  
            break;}  
        break; }  
    } while (choice != 0);}}}
```

Output

```
1. Create a employee  
2. View Employee details  
3. Generate Salary details  
4. List Employees  
5. Not an admin  
Enter Your choice  
1  
1. Teaching  
2. Non Teaching  
1  
Name :  
abhi  
Empi ID  
1  
1. Create a employee  
2. View Employee details  
3. Generate Salary details  
4. List Employees  
5. Not an admin
```

```
Enter Your choice
2
1. Teaching
2. Non Teaching
1
Name: abhi
ID: 1
Salary: 108000
1. Create a employee
2. View Employee details
3. Generate Salary details
4. List Employees
5. Not an admin
Enter Your choice
3
1. Teaching
2. Non Teaching
1
Name:abhi      Salary: 108000
1. Create a employee
2. View Employee details
3. Generate Salary details
4. List Employees
5. Not an admin
Enter Your choice
```

```
Enter Your choice
5
1. Teaching
2. Non Teaching
2
Emp id:
1
1. Create a employee
2. View Employee details
3. Generate Salary details
4. List Employees
5. Not an admin
Enter Your choice
```

Result

The C# console application for Employee Management System was compiled and executed successfully.

Ex. No. 2	Operator Overloading		
Date of Exercise	21.07.2017	Date of Upload	15.08.2017

Aim

Design and develop a menu driven console application in C# for performing various operations on 2D and 3D Coordinates. Follow carefully the instructions given below.

- Create and interface IOperations and declare Display function.
- Create a Coordinates class which implements the IOperations interface.
- Create a Vector class which inherits the Coordinates class.
- Create a Point class which inherits the Coordinates class
- Create CoordinatesTest class which contains the Main function and write a menu driven program to demonstrate the various functionalities

Youtube Link

https://www.youtube.com/watch?v=mudlA_C_PoI

Description

Overloaded operators are functions with special names the keyword **operator** followed by the symbol for the operator being defined. similar to any other function, an overloaded operator has a return type and a parameter list. To overload an operator on a custom class requires creating a method on the class with the correct signature. The method must be named "operator X" where X is the name or symbol of the operator being overloaded. Unary operators have one parameter, and binary operators have two parameters. In each case, one parameter must be the same type as the class or struct that declares the operator.

Operator overloading provides a much natural abstraction for the types. When we think about possible operation on some data type we can think of binary operators, unary operators, relational operators and perhaps some conversion operations to and from the basic types. In C# achieving all this is possible using operator overloading.

Program

```
using System;
```

```
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
```

```
namespace Exp2
{
    interface Io
    {
        void display2d();
        void display3d();
    }

    public class coordinate : Io
    {
        public int x;
        public int y;
        public int z;
        public static coordinate operator +(coordinate p1, coordinate p2)
        {
            coordinate temp = new coordinate();
            temp.x = p1.x + p2.x;
            temp.y = p1.y + p2.y;
            return temp;
        }
        public static coordinate operator -(coordinate p1, coordinate p2)
        {
            coordinate temp = new coordinate();
            temp.x = p1.x - p2.x;
            temp.y = p1.y - p2.y;
            return temp;
        }
        public static coordinate operator *(coordinate p1, coordinate p2)
        {
            coordinate temp = new coordinate();
            temp.x = p1.x * p2.x;
            temp.y = p1.y * p2.y;
            return temp;
        }
        public static bool operator ==(coordinate p1, coordinate p2)
        {

```

```
        if (p1.x == p2.x && p1.y == p2.y)
            return true;
        else
            return false;
    }

    public static bool operator !=(coordinate p1, coordinate p2)
    {
        coordinate temp = new coordinate();
        if (p1.x != p2.x && p1.y != p2.y)
            return false;
        else
            return true;
    }

    public coordinate() { }
    public coordinate(int c, int d)
    {
        x = c;
        y = d;
    }
    public coordinate(int a, int b, int c)
    {
        x = a;
        y = b;
        z = c;
    }
    public virtual void display2d()
    {
        Console.WriteLine("X:" + x);
        Console.WriteLine("Y:" + y);
    }
    public virtual void display3d()
    {
        Console.WriteLine("X:" + x);
        Console.WriteLine("Y:" + y);
        Console.WriteLine("Z:" + z);
    }
}
```

```
public static explicit operator coordinate(int s)
{
    return new coordinate(s, s);
}
public static implicit operator int(coordinate c)
{
    return c.x;
}
}
class point : coordinate
{
    public point(int x, int y, int z)
    {
        this.x = x;
        this.y = y;
        this.z = z;
    }
    public point() { }
    public static point operator +(point p1, point p2)
    {
        point temp = new point();
        temp.x = p1.x + p2.x;
        temp.y = p1.y + p2.y;
        temp.z = p1.z + p2.z;
        return temp;
    }
    public static point operator *(point p1, point p2)
    {
        point temp = new point();
        temp.x = p1.x * p2.x;
        temp.y = p1.y * p2.y;
        temp.z = p1.z * p2.z;
        return temp;
    }
    public static point operator -(point p1, point p2)
    {
        point temp = new point();
```



```
        temp.x = p1.x - p2.x;
        temp.y = p1.y - p2.y;
        temp.z = p1.z - p2.z;
        return temp;
    }
    public static bool operator ==(point p1, point p2)
    {
        if (p1.x == p2.x && p1.y == p2.y && p1.z == p2.z)
            return true;
        else
            return false;
    }

    public static bool operator !=(point p1, point p2)
    {
        point temp = new point();
        if (p1.x != p2.x && p1.y != p2.y && p1.z != p2.z)
            return false;
        else
            return true;
    }
    public override void display2d()
    {
        base.display2d();
    }
    public override void display3d()
    {
        base.display3d();
    }
}

class Program
{
    static void Main(string[] args)
    {
        coordinate c = new coordinate(2, 4);
        coordinate e = new coordinate(8, 4);
        point d = new point(2, 4, 5);
        point f = new point(1, 1, 1);
    }
}
```

```
Console.WriteLine("2 d coordinate 1");
c.display2d();
Console.WriteLine("2 d coordinate 2");
e.display2d();
Console.WriteLine("3 d coordinate 1");
d.display3d();
Console.WriteLine("3 d coordinate 2");
f.display3d();
coordinate p3 = new coordinate();
Console.WriteLine("+ operator");
p3 = c + e;
p3.display2d();
Console.WriteLine("* operator");
p3 = c * e;
p3.display2d();
Console.WriteLine("- operator");
p3 = c - e;
p3.display2d();
Console.WriteLine("== operator");
if (c == e)
{
    Console.WriteLine("equal");
}
else
    Console.WriteLine("not equal");

p3.display2d();
point p4 = new point();
Console.WriteLine("3D coordinates");
Console.WriteLine("+ operator");
p4 = d + f;
p4.display3d();
Console.WriteLine("- operator");
p4 = d - f;
p4.display3d();
Console.WriteLine("* operator");
p4 = d * f;
p4.display3d();
if (d == f)
{
    Console.WriteLine("equal");
}
```

```
    }
    else
        Console.WriteLine("not equal");

    Console.WriteLine("EXPLICIT CONVERSION");
    Console.WriteLine("enter one points");
    int s, h;
    s = int.Parse(Console.ReadLine());
    //h = int.Parse(Console.ReadLine());
    coordinate r = (coordinate)s;
    r.display2d();
    Console.WriteLine("IMPLICIT CONVERSION");
    coordinate m = new coordinate(2, 3);
    h = m;
    Console.WriteLine(h);

Console.ReadLine();
    }
}

}
```

Output

```
2 d coordinate 1
X:2
Y:4
2 d coordinate 2
X:8
Y:4
3 d coordinate 1
X:2
Y:4
Z:5
3 d coordinate 2
X:1
Y:1
Z:1
+ operator
X:10
Y:8
* operator
X:16
Y:16
- operator
X:-6
Y:0
== operator
not equal
X:-6
Y:0
3D coordinates
+ operator
X:3
Y:5
Z:6
- operator
X:1
Y:3
Z:4
* operator
X:2
Y:4
Z:5
not equal
EXPLICIT CONVERSION
enter one points
```

Result

The C# console application for Point and Vector was compiled and executed successfully.

Ex. No. 3	Delegates and Events		
Date of Exercise	28.07.2017	Date of Upload	25.08.2017

Aim

Design and develop a menu driven console application in C# for performing various operations on Vector class object. Follow carefully the instructions given below.

a. Create a Vector class

i. Add instance and overloaded constructors

ii. Override the ToString() function to print the Vector object in “(x, y, z)” format

iii. Add functions to Add and subtract two Vector objects.

b. Create VectorTest class which contains the Main function and write a menu driven program to demonstrate the various functionalities listed below

1. Add two Vector objects

2. Subtract two Vector objects

3. Array of Delegates

4. Multicast delegates

5. Anonymous Methods to multiply a Vector object by 2

6. Lambda expression to Add a Vector object by 5

Youtube Link

<https://www.youtube.com/watch?v=Rku0VnEZR1M>

Description

A delegate is a reference type, like the other reference types you've seen in this book, but instead of referring to an object, a delegate refers to a *method*. This is called *encapsulating* the method.

When you create the delegate, you specify a method signature and return type; you can encapsulate any matching method with that delegate. You create a delegate with

the **delegate** keyword, followed by a return type and the signature of the methods that can be delegated to it, as in the following:

```
public delegate int FindResult(object obj1, object obj2);
```

This declaration defines a delegate named **FindResult**, which will encapsulate any method that takes two objects as parameters and that returns an **int**.

Program

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Exp3
{
    class vector
    {
        public int x, y, z;
        public vector()
        {
            x = 0;
            y = 0;
            z = 0;
        }

        public vector(int x, int y, int z)
        {
            this.x = x;
            this.y = y;
            this.z = z;
        }

        public void two(vector v)
        {
            Console.WriteLine(" function two");
        }

        public void display(vector v)
        {
            string s1, s2, s3;
            s1 = v.x.ToString();
```

```
s2 = v.y.ToString();
s3 = v.z.ToString();
Console.WriteLine("Point x:" + s1);
Console.WriteLine("Point y:" + s2);
Console.WriteLine("Point z:" + s3);

}
public static vector operator +(vector p1, vector p2)
{
    vector temp = new vector();
    temp.x = p1.x + p2.x;
    temp.y = p1.y + p2.y;
    temp.z = p1.z + p2.z;
    return temp;
}
public static vector operator -(vector p1, vector p2)
{
    vector temp = new vector();
    temp.x = p1.x - p2.x;
    temp.y = p1.y - p2.y;
    temp.z = p1.z - p2.z;
    return temp;
}
}
delegate void del(vector v);
class Program
{
    static event del myevent;
    static void Main(string[] args)
    {

        vector v = new vector(2, 3, 4);
        vector v1 = new vector(4, 5, 6);
        Console.WriteLine("1.display points");
        Console.WriteLine("2.add two vector");
        Console.WriteLine("3.subtract two vector");
        Console.WriteLine("4.array of delegates");
        Console.WriteLine("5.multicast delegates");
        Console.WriteLine("6.Anonymous Methods to multiply a Vector object by 2");
        Console.WriteLine("7.Lambda expression to Add a Vector object by 5");
        while (true)
```

```
{
    Console.WriteLine("enter your choice");
    int ch;
    ch = int.Parse(Console.ReadLine());
    switch (ch)
    {
        case 1:
            Console.WriteLine("vector v1");
            v.display(v);
            Console.WriteLine("vector v2");
            v1.display(v1);
            break;
        case 2:
            vector v2;
            v2 = v + v1;
            Console.WriteLine("Point x:" + v2.x);
            Console.WriteLine("Point y:" + v2.y);
            Console.WriteLine("Point z:" + v2.z);
            break;
        case 3:
            vector v3;
            v3 = v - v1;
            Console.WriteLine("Point x:" + v3.x);
            Console.WriteLine("Point y:" + v3.y);
            Console.WriteLine("Point z:" + v3.z);
            break;
        case 4:
            Console.WriteLine("array of delegates");
            del[] op = { v.display, v.two };
            for (int i = 0; i < op.Length; i++)
            {
                op[i](v1);
            }

            break;
        case 5:
            Console.WriteLine("multicast delegates");
            myevent += new del(v.display);
            del d = new del(v.display);
            d += v.two;
            d(v);
    }
}
```



```
        myevent(v);
        break;
    case 6:
        del d1 = delegate(vector v5)
        {
            Console.WriteLine("vector object multiplied by 2");
            Console.WriteLine("Point x:" + v5.x * 2);
            Console.WriteLine("Point y:" + v5.y * 2);
            Console.WriteLine("Point z:" + v5.z * 2);
        };
        d1(v);
        break;

    case 7:
        Console.WriteLine("vector object added by 5");
        del mydel = vector =>
        {
            v.x = v.x + 5;
            v.y = v.y + 5;
            v.z = v.z + 5;
            v.display(v);
        };
        mydel(v);
        break;
    }
}
}}}}}
```

Output

```
1.display points
2.add two vector
3.subtract two vector
4.array of delegates
5.multicast delegates
6.Anonymous Methods to multiply a Vector object by 2
7.Lambda expression to Add a Vector object by 5
enter your choice
1
vector v1
Point x:2
Point y:3
Point z:4
vector v2
Point x:4
Point y:5
Point z:6
enter your choice
2
Point x:6
Point y:8
Point z:10
enter your choice
3
Point x:-2
Point y:-2
Point z:-2
enter your choice
4
array of delegates
Point x:4
Point y:5
Point z:6
function two
enter your choice
5
multicast delegates
Point x:2
Point y:3
Point z:4
function two
Point x:2
Point y:3
Point z:4
enter your choice
6
vector object multiplied by 2
Point x:4
Point y:6
Point z:8
enter your choice
7
vector object added by 5
Point x:7
Point y:8
Point z:9
enter your choice
```

Result

The C# console application for Delegates and Events was compiled and executed successfully.

Ex. No. 4	String Manipulation and Regular Expression		
Date of Exercise	04.08.2017	Date of Upload	03.09.2017

Aim

Write programs in C# using the functions available with string or StringBuilder. Demonstrate the application of Regular expression in extracting data the register number format is same as the Karunya university student register number format. Use the given input and follow the instructions closely.

- Extract all the Register numbers and display it.
- Display all the numbers which has a prefix of PR.
- Display all the numbers ending with 0
- Replace all the Odd numbers with 0 and display the result
- Replace all the even numbers with 1 and display the result
- Display all the duplicate numbers
- Concatenate any two numbers and display the result
- Take any given number, if there is a repeating digit, return the last occurrence of that digit in the number.
- Insert K at the beginning of the numbers.
- Find out the first occurrence of a given digit in a register number
- List all the register numbers that has a substring “R16” in it.

Youtube Link

<https://www.youtube.com/watch?v=yXQX6SPEGOI>

Description

A **regular expression** is a pattern that could be matched against an input text. The .Net framework provides a regular expression engine that allows such matching. A pattern consists of one or more character literals, operators, or

constructs. The [System.Text.RegularExpressions.Regex](#) class can be used to search strings. These searches can range in complexity from very simple to making full use of regular expressions.

The following are two examples of string searching by using the [Regex](#) class. For more information, see [.NET Framework Regular Expressions](#).

C# supports regular expressions through the classes in the System.Text.RegularExpressions namespace in the standard .NET framework.

While there are some differences in advanced features supported by the .NET regular expression library compared to PCRE, they both share a large part of the syntax and patterns and expressions can be used in C# and other languages.

Be sure to import the following namespaces at the top of the source file if you are trying out the code:

using System.Text.RegularExpressions;

Program

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Text.RegularExpressions;

namespace Exp4

{

    class Program

    {

        static List<string> myCollection = new List<string> { " " };

    }

}
```

```
public static void ExtractReg(string[] text)
{
    Console.WriteLine("The Extracted Register Number are: ");
    foreach(string a in text)
    {
        MatchCollection mc = Regex.Matches(a, @"\b[A-Z]{2}[0-9]{2}[A-Z]{2}[0-9]{3}\b");
        foreach (Match m in mc)
        {
            Console.WriteLine(m);
            myCollection.Add(m.ToString());
        }
    }
}

private static void PrefixpPR(string[] text)
{
    Console.WriteLine("The Extracted Register Number Starting with PR are: ");
    foreach (string a in text)
    {
        MatchCollection mc = Regex.Matches(a, @"\b[PR]\S*\b");
        foreach (Match m in mc)
        {
            Console.WriteLine(m);
            myCollection.Add(m.ToString());
        }
    }
}

private static void Ending0(string[] text)
{

```

```
Console.WriteLine("The Extracted Register Number Ending with 0 are: ");

foreach (string a in text)
{
    MatchCollection mc = Regex.Matches(a, @"\b\S*[0]\b");

    foreach (Match m in mc)
    {
        Console.WriteLine(m);
    }
}

private static void Odd(string[] text)
{
    Console.WriteLine("Odd Numbers are: ");

    foreach (string a in text)
    {
        string x = a;

        MatchCollection mc = Regex.Matches(a, @"\b\S*[13579]\b");

        foreach (Match m in mc)
        {
            char old='\0';

            foreach (char t in a)
            {
                old = t;
            }

            x=x.Replace(old, '0');
        }
    }
}
```

```
        Console.WriteLine(x);}}}  
  
private static void Even(string[] text)  
{  
    Console.WriteLine("Even Numbers are: ");  
    foreach (string a in text)  
    {  
        string x = a;  
        MatchCollection mc = Regex.Matches(a, @"\b\S*[02468]\b");  
        foreach (Match m in mc)  
        {  
            char old = '0';  
            foreach (char t in a)  
            {  
                old = t;  
            }  
            x = x.Replace(old, '1');  
            Console.WriteLine(x);  
        }  
    }  
}  
  
private static void DuplicateNum(string[] text)  
{  
    Console.WriteLine("Duplicate Numbers are: ");  
    for (int i = 0; i < myCollection.Count; i++)
```

```
{
    for (int j = i + 1; j < myCollection.Count; j++)
    {
        int z = String.Compare(text[i], text[j], true);
        if (z == 0)
            Console.WriteLine("Duplicate Found:{0}", text[i]);
    }
}

private static void RepeatingDigits(string text)
{
    Console.WriteLine("Repeating Digits if any");
    int l = text.Length;
    for (int i = 0; i < l; i++)
    {
        for (int j = i + 1; j < l; j++)
        {
            if (text[i] == text[j])
                Console.WriteLine(text[i]);
        }
    }
}

private static void FirstOcc(string[] text, int x)
{
    for (int i = 0; i < 12; i++)
    {
```



```
        for (int j = 0; j < text[i].Length; j++)
        {
            if (text[i] == text[j])
                Console.WriteLine(text[i]);
        }
    }

    static void Main(string[] args)
    {
        string[] inp = { "A few register numbers are listed here for performing string operations
UR12CS012, UR12CS012,UR13CS234, UR14CS456, UR16CS987, ur14 , 123, 345, cs345,
PR14CS1001, PR16CS2020 and there are so many other numbers such as CS201 , UR201, " };

        ExtractReg(inp);
        PrefixpPR(inp);
        Ending0(inp);
        Odd(myCollection.ToArray());
        Even(myCollection.ToArray());
        DuplicateNum(myCollection.ToArray());
        string jedi = myCollection.ToArray()[0];
        jedi += myCollection.ToArray()[1] + myCollection.ToArray()[2];
        Console.WriteLine("Concatenated String is: {0}", jedi);
        RepeatingDigits(myCollection.ToArray()[1]);
        foreach (string z in myCollection.ToArray())
        {
            Console.WriteLine("K{0}", z);
        }
    }
}
```

```
}

Console.WriteLine("Enter a digit");

string d = Console.ReadLine();

foreach (string s in myCollection.ToArray())
{
    int a = s.IndexOf(d);
    if (a != -1)
    {
        Console.WriteLine("Digit Found in {0} position for {1}", a + 1, s);
    }
}

foreach (string s in myCollection.ToArray())
{
    int a = s.IndexOf("R16");
    if (a != -1)
    {
        Console.WriteLine("R16 in {0} position for {1}", a, s);
    }
}

Console.ReadLine();}}
```

Output

```
The Extracted Register Number are:
UR12CS012
UR12CS012
UR13CS234
UR14CS456
UR16CS987
The Extracted Register Number Starting with PR are:
PR14CS1001
PR16CS2020
The Extracted Register Number Ending with 0 are:
PR16CS2020
Odd Numbers are:
UR16CS980
PR04CS0000
Even Numbers are:
UR11CS011
UR11CS011
UR13CS231
UR14CS451
PR16CS2121
Duplicate Numbers are:
Duplicate Found:UR12CS012
Concatenated String is: UR12CS012UR12CS012
Repeating Digits if any
1
2
K
KUR12CS012
KUR12CS012
KUR13CS234
KUR14CS456
KUR16CS987
KPR14CS1001
KPR16CS2020
Enter a digit
1
Digit Found in 3 position for UR12CS012
Digit Found in 3 position for UR12CS012
Digit Found in 3 position for UR13CS234
Digit Found in 3 position for UR14CS456
Digit Found in 3 position for UR16CS987
Digit Found in 3 position for PR14CS1001
Digit Found in 3 position for PR16CS2020
R16 in 1 position for UR16CS987
R16 in 1 position for PR16CS2020
```

Result

The C# console application for Strings and Regular Expressions was compiled and executed successfully.

Ex. No. 5	Exception Handling		
Date of Exercise	18.07.2017	Date of Upload	12.08.2017

Aim

Write a program in C# to automate the ATM operations by demonstrating the use of exception handling.

Create custom exceptions to deal with the following situations:

1. Invalid PIN number is entered more than 3 times
2. Withdraw operation when balance amount < withdraw amount
3. A non-integer value is encountered in the PIN number

Youtube Link

<https://www.youtube.com/watch?v=GvDIeUvT4S8>

Description

The C# language's exception handling features help you deal with any unexpected or exceptional situations that occur when a program is running. Exception handling uses the **try, catch and finally** keywords to try actions that may not succeed, to handle failures when you decide that it is reasonable to do so, and to clean up resources afterward. Exceptions can be generated by the common language runtime (CLR), by the .NET Framework or any third-party libraries, or by application code. Exceptions are created by using the throw keyword. +

Exception handling is a builtin mechanism in .NET framework to detect and handle run time errors. The .NET framework contains many standard exceptions. The exceptions are anomalies that occur during the execution of a program. They can be because of user, logic or system errors. If a user (programmer) does not provide a mechanism to handle these anomalies, the .NET run time environment provides a default mechanism that terminates the program execution.

C# provides the three keywords try, catch and finally to do exception handling. The try block encloses the statements that might throw an exception whereas catch handles an exception if one exists. The finally can be used for doing any clean up process.

The general form of try-catch-finally in C# is shown below.

```
try
{
    // Statement which can cause an exception.
}
catch(Type x)
{
    // Statements for handling the exception
}
finally
{
    //Any cleanup code
}
```

Program

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace ConsoleApplication6
{
    class Myex : ApplicationException
    {
    }
}
```

```
class Program
{
    string name;
    float money;
    int pin;
    public void addaccount()
    {
        Console.WriteLine("enter name");
        name = Console.ReadLine();
        Console.WriteLine("enter pin");
        money = 0;
        try { pin = int.Parse(Console.ReadLine()); }
        catch
        {
            Console.WriteLine("pin mismatch please enter valid pin");
        }
    }
    public void displayaccount()
    {
        Console.WriteLine("ACCOUNT NAME:  "+name+"  "+money);}
    public void addmoney()
    {
```

```
        Console.WriteLine("ENTER AMOUNT YOU WANT TO ADD");

        float m;

        m= float.Parse(Console.ReadLine());

        money = money + m;

        Console.WriteLine("AMOUNT ADDED SUCCESSFULLY");

    }

    public void withdrawmoney()
    {

        Console.WriteLine("ENTER AMOUNT YOU WANT TO WITHDRAW");

        float m;

        m = float.Parse(Console.ReadLine());

        if (m > money) {

            Myex invalidmoney= new Myex();

            try

            {

                throw invalidmoney;

            }

            catch (Myex e2)

            {

                Console.WriteLine("TRANSACTION FAILED" + "    " + e2.Message);

            }}

        else
```

```
        money = money - m;

        //Console.WriteLine("AMOUNT WITHDRAWN SUCCESSFULLY");
    }

    static void Main(string[] args)
    {
        Program[] p = new Program[20];

        int i = 0;

        Myex rpin = new Myex();

        Myex tpin = new Myex();


        int n;

        while (true) {

            int c1, ampin;

            int chance = 3;

            p[i] = new Program();

            Console.WriteLine("ATM SERVICE ");

            Console.WriteLine("1:CREATE ACCOUNT");

            Console.WriteLine("2:DISPLAY ACCOUNT");

            Console.WriteLine("3:ADD MONEY");

            Console.WriteLine("4:WITHDRAWL MONEY");

            n = int.Parse(Console.ReadLine());

            switch(n){
```


case 1:

```
Console.WriteLine("CREATE ACCOUNT");
```

```
p[i].addaccount();
```

```
i++;
```

```
break;
```

case 2:

```
Console.WriteLine("DISPLAY ACCOUNT");
```

```
for (int k = 0; k < i; k++)
```

```
{
```

```
    p[k].displayaccount();
```

```
}
```

```
break;
```

case 3:

```
Console.WriteLine("CHOOSE ACCOUNT TO ADD MONEY");
```

```
for (int k = 0; k < i; k++)
```

```
{
```

```
    p[k].displayaccount();
```

```
}
```

```
int c, apin;
```

```
c = int.Parse(Console.ReadLine());
```

```
while (true)
```

```
{
```

```
while (true)
{
    Console.WriteLine("enter pin");
    try
    {
        apin = int.Parse(Console.ReadLine());
        break;
    }
    catch
    {
        Console.WriteLine("pin mismatch please enter valid pin");
    }
}
if (apin == p[c].pin)
{
    p[c].addmoney();
    chance = 3;
    break;
}
else
{
    chance--;
    Console.WriteLine("wrong pin");
}
```

```
        Console.WriteLine("chance left:" + chance);
        if (chance == 0)
        {
            try { throw rpin; }
            catch (Myex e)
            {
                Console.WriteLine("no chance left" + " " + e.Message);
                break;
            }
        } } break;

    case 4:

        Console.WriteLine("CHOOSE ACCOUNT TO WITHDRAW MONEY");

        for (int k = 0; k < i; k++)
        {
            p[k].displayaccount();
        }

        c1 = int.Parse(Console.ReadLine());

        while (true)
        {
            while (true)
            {
                Console.WriteLine("enter pin");
```

```
        try
        {
            ampin = int.Parse(Console.ReadLine());
            break;
        }
        catch
        {
            Console.WriteLine("pin mismatch please enter valid pin");
        }
    }

    if (ampin == p[c1].pin)
    {
        p[c1].withdrawmoney();
        chance = 3;
        break;
    }
    else
    {
        chance--;
        Console.WriteLine("wrong pin");
        Console.WriteLine("chance left:" + chance);
        if (chance == 0)
```

```
{  
    try { throw rpin; }  
    catch (Myex e)  
    {  
        Console.WriteLine("no chance left" + " " + e.Message);  
        break; } } }  
break; } }  
} } }
```

Output

```
ATM SERVICE
1:CREATE ACCOUNT
2:DISPLAY ACCOUNT
3:ADD MONEY
4:WITHDRAWL MONEY
1
CREATE ACCOUNT
enter name
axcv
enter pin
1234
ATM SERVICE
1:CREATE ACCOUNT
2:DISPLAY ACCOUNT
3:ADD MONEY
4:WITHDRAWL MONEY
2
DISPLAY ACCOUNT
ACCOUNT NAME:   axcv   0
ATM SERVICE
1:CREATE ACCOUNT
2:DISPLAY ACCOUNT
3:ADD MONEY
4:WITHDRAWL MONEY
3
CHOOSE ACCOUNT TO ADD MONEY
ACCOUNT NAME:   axcv   0
0
enter pin
1234
ENTER AMOUNT YOU WANT TO ADD
1000
AMOUNT ADDED SUCCESSFULLY
ATM SERVICE
1:CREATE ACCOUNT
2:DISPLAY ACCOUNT
3:ADD MONEY
4:WITHDRAWL MONEY
2
```

```
DISPLAY ACCOUNT
ACCOUNT NAME:      axcv      1000
ATM SERVICE
1:CREATE ACCOUNT
2:DISPLAY ACCOUNT
3:ADD MONEY
4:WITHDRAWL MONEY
4
CHOOSE ACCOUNT TO WITHDRAW MONEY
ACCOUNT NAME:      axcv      1000
0
enter pin
1234
ENTER AMOUNT YOU WANT TO WITHDRAW
20000
TRANSACTION FAILED      Error in the application.
ATM SERVICE
1:CREATE ACCOUNT
2:DISPLAY ACCOUNT
3:ADD MONEY
4:WITHDRAWL MONEY
4
CHOOSE ACCOUNT TO WITHDRAW MONEY
ACCOUNT NAME:      axcv      1000
0
enter pin
1234
ENTER AMOUNT YOU WANT TO WITHDRAW
500
ATM SERVICE
1:CREATE ACCOUNT
2:DISPLAY ACCOUNT
3:ADD MONEY
4:WITHDRAWL MONEY
2
DISPLAY ACCOUNT
ACCOUNT NAME:      axcv      500
ATM SERVICE
1:CREATE ACCOUNT
2:DISPLAY ACCOUNT
3:ADD MONEY
4:WITHDRAWL MONEY
```

Result

The C# console application for ATM operations using Exception Handling was compiled and executed successfully.

Ex. No. 6	Collections		
Date of Exercise	01.09.2017	Date of Upload	11.10.2017

Aim

Write a program in C# managing Telephone Directory using Hash Table.

Youtube Link

<https://www.youtube.com/watch?v=Q3Aik5xu-Q4>

Description

Collection classes are specialized classes for data storage and retrieval. These classes provide support for stacks, queues, lists, and hash tables. Most collection classes implement the same interfaces. Collection classes serve various purposes, such as allocating memory dynamically to elements and accessing a list of items on the basis of an index etc. These classes create collections of objects of the Object class, which is the base class for all data types in C#.

There are two types of collections available in C#: non-generic collections and generic collections. We will learn about non-generic collections in this section.

Every collection class implements the IEnumerable interface so values from the collection can be accessed using a foreach loop. The System.Collections namespace includes following non-generic collections. **ArrayList** , **SortedList** , **Stack** , **Queue** , **Hashtable** , **BitArray**.

Program

```
using System;  
  
using System.Collections.Generic;  
  
using System.Linq;  
  
using System.Text;  
  
using System.Threading.Tasks;
```



```
using System.Collections;

namespace TelephoneDirectory
{
    class Program
    {
        static void Main(string[] args)
        {
            SortedDictionary<string, string> openWith =
            new SortedDictionary<string, string>();

            string name;

            string phone;

            Hashtable user = new Hashtable();

            Console.WriteLine("TELEPHONE DIRECTORY");

            Console.WriteLine("*****");

            Console.WriteLine("1) ADD DATA");

            Console.WriteLine("2) DISPLAY DATA");

            Console.WriteLine("3) SEARCH DATA");

            Console.WriteLine("4) DELETE DATA");

            Console.WriteLine("5) SORTING DATA BY NAME");

            int ch;

            while (true)
            {
```

```
Console.WriteLine("ENTER YOUR CHOICE");

ch = int.Parse(Console.ReadLine());

switch (ch)
{
    case 1:

        Console.WriteLine("ADD USER");

        Console.WriteLine("ENTER NAME");

        name = Console.ReadLine();

        Console.WriteLine("ENTER PHONE NUMBER");

        phone = Console.ReadLine();

        user.Add(phone, name);

        openWith.Add(phone, name);

        Console.WriteLine("USER ADDED SUCCESSFULLY");

        name = "";

        phone = "";

        break;

    case 2:

        Console.WriteLine("DISPLAY USER");

        foreach (string key in user.Keys)
        {

            Console.WriteLine(String.Format("{0} : {1}",user[key],key));
```

```
    }

    break;

case 3:

    string search;

    Console.WriteLine("ENTER NAME YOU WANT TO SEARCH IN
TELEPHONE DIRECTORY");

    search = Console.ReadLine();

    if (user.ContainsValue(search))

    {

        foreach (string key in user.Keys)

        {

            if (user[key].Equals(search))

                Console.WriteLine("USER EXIST WITH
PHONENUMBER    "+"":    "+key) ;

        }

    }

    else

        Console.WriteLine("USER NOT EXIST");

    break;

case 4:

    string find;

    Console.WriteLine("DELETE USER");
```

```
Console.WriteLine("ENTER NAME YOU WANT TO DELETE IN  
TELEPHONE DIRECTORY");
```

```
find = Console.ReadLine();
```

```
if (user.ContainsValue(find))
```

```
{
```

```
    foreach (string key in user.Keys)
```

```
    {
```

```
        if (user[key].Equals(find))
```

```
        {
```

```
            user.Remove(key);
```

```
            Console.WriteLine("USER DELETED");
```

```
            break;
```

```
        }}}
```

```
else
```

```
    Console.WriteLine("USER NOT FOUND");
```

```
break;
```

```
case 5:
```

```
    foreach (KeyValuePair<string, string> kvp in openWith)
```

```
    {
```

```
        Console.WriteLine("Username = {0}, Telephone = {1}",
```

```
            kvp.Key, kvp.Value);
```

```
    }
```

```
break; } } } }
```

Output

```
TELEPHONE DIRECTORY
*****
1> ADD DATA
2> DISPLAY DATA
3> SEARCH DATA
4> DELETE DATA
5> SORTING DATA BY NAME
ENTER YOUR CHOICE
1
ADD USER
ENTER NAME
abc
ENTER PHONE NUMBER
123456789
USER ADDED SUCCESSFULLY
ENTER YOUR CHOICE
2
DISPLAY USER
abc      :    123456789
ENTER YOUR CHOICE
3
ENTER NAME YOU WANT TO SEARCH IN TELEPHONE DIRECTORY
abc
USER EXIST WITH PHONENUMBER      :    123456789
ENTER YOUR CHOICE
4
DELETE USER
ENTER NAME YOU WANT TO DELETE IN TELEPHONE DIRECTORY
abc
USER DELETED
ENTER YOUR CHOICE
```

Result

The C# console application for managing Telephone Directory using Hash Table and Collections was compiled and executed successfully.

Ex. No. 7	Windows Form Application		
Date of Exercise	08.09.2017	Date of Upload	10.10.2017

Aim

Write a program in C# managing Placement Details System using Windows form Application.

Concepts to be included:

1. MDI concept
2. Database connectivity – insert, update, delete, search
3. Display using Gridview
4. Login pages to be validated
5. Admin and user login

Youtube Link

<https://www.youtube.com/watch?v=M7hZJNdkMA>

Description

Windows Forms provide your project with components, such as dialog boxes, menus, buttons, and many other controls, that make up a standard Windows application user interface (UI).

Fundamentally, these controls are just classes from the .NET Framework class library.

The **Designer** view in Visual C# Express Edition enables you to drag the controls onto your application's main form and adjust their size and position. As you do this, the IDE automatically adds the source code to create an instance of the appropriate class and initialize it.

Program

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.Threading.Tasks;

using System.Windows.Forms;

using System.Data.SqlClient;
```

```
namespace Exp7Final
```

```
{
```

```
    public partial class Form1 : Form
```

```
    {
```

```
        public Form1()
```

```
        {
```

```
            InitializeComponent();
```

```
        }
```

```
        private void Form1_Load(object sender, EventArgs e)
```

```
{  
  
}  
  
private void button1_Click(object sender, EventArgs e)  
{  
    string user = textBox1.Text;  
    string pass = textBox2.Text;  
  
    SqlConnection conn = new SqlConnection(@"Data Source=DESKTOP-  
0E74DKL\SQLEXPRESS;Initial Catalog=placement;Integrated Security=True");  
  
    SqlDataAdapter sda = new SqlDataAdapter("Select Count(*) from login where id='" +  
user + "' and pass='" + pass + "'", conn);  
  
    DataTable dt = new DataTable();  
  
    sda.Fill(dt);  
  
    string u = "jedi", p = "jedi";  
  
    if (dt.Rows[0][0].ToString() == "1")  
    {  
        this.Hide();  
  
        Studentmain m = new Studentmain();  
  
        m.Show();  
    }  
  
    else if (user.Equals(u) && pass.Equals(p))  
    {
```



```
        this.Hide();

        Main m = new Main();

        m.Show();
    }

    else
    {
        MessageBox.Show("Wrong Username or Password");
    }
}

private void button2_Click(object sender, EventArgs e)
{
    this.Close();
}
}
```

Form1.Designer.cs

```
namespace Exp7Final
{
    partial class Form1
    {
        /// <summary>
```

```
/// Required designer variable.  
/// </summary>  
  
private System.ComponentModel.IContainer components = null;  
  
/// <summary>  
/// Clean up any resources being used.  
/// </summary>  
  
/// <param name="disposing">true if managed resources should be disposed; otherwise,  
false.</param>  
  
protected override void Dispose(bool disposing)  
{  
    if (disposing && (components != null))  
    {  
        components.Dispose();  
    }  
    base.Dispose(disposing);  
}  
  
#region Windows Form Designer generated code  
  
/// <summary>  
/// Required method for Designer support - do not modify
```

```
/// the contents of this method with the code editor.

/// </summary>

private void InitializeComponent()
{
    this.label1 = new System.Windows.Forms.Label();
    this.label2 = new System.Windows.Forms.Label();
    this.label3 = new System.Windows.Forms.Label();
    this.textBox1 = new System.Windows.Forms.TextBox();
    this.textBox2 = new System.Windows.Forms.TextBox();
    this.button1 = new System.Windows.Forms.Button();
    this.button2 = new System.Windows.Forms.Button();
    this.SuspendLayout();

    //

    // label1

    //

    this.label1.AutoSize = true;
    this.label1.Location = new System.Drawing.Point(148, 83);
    this.label1.Name = "label1";
    this.label1.Size = new System.Drawing.Size(55, 13);
    this.label1.TabIndex = 0;
    this.label1.Text = "Username";

    //
```

```
// label2

//

this.label2.AutoSize = true;

this.label2.Location = new System.Drawing.Point(148, 129);

this.label2.Name = "label2";

this.label2.Size = new System.Drawing.Size(53, 13);

this.label2.TabIndex = 1;

this.label2.Text = "Password";

//

// label3

//

this.label3.AutoSize = true;

this.label3.Location = new System.Drawing.Point(276, 26);

this.label3.Name = "label3";

this.label3.Size = new System.Drawing.Size(29, 13);

this.label3.TabIndex = 2;

this.label3.Text = "login";

//

// textBox1

//

this.textBox1.Location = new System.Drawing.Point(220, 80);

this.textBox1.Name = "textBox1";
```

```
this.textBox1.Size = new System.Drawing.Size(236, 20);

this.textBox1.TabIndex = 3;

//

// textBox2

//

this.textBox2.Location = new System.Drawing.Point(220, 126);

this.textBox2.Name = "textBox2";

this.textBox2.Size = new System.Drawing.Size(236, 20);

this.textBox2.TabIndex = 4;

//

// button1

//

this.button1.Location = new System.Drawing.Point(220, 199);

this.button1.Name = "button1";

this.button1.Size = new System.Drawing.Size(75, 23);

this.button1.TabIndex = 5;

this.button1.Text = "Login";

this.button1.UseVisualStyleBackColor = true;

this.button1.Click += new System.EventHandler(this.button1_Click);

//

// button2

//
```

```
this.button2.Location = new System.Drawing.Point(355, 199);

this.button2.Name = "button2";

this.button2.Size = new System.Drawing.Size(75, 23);

this.button2.TabIndex = 6;

this.button2.Text = "Exit";

this.button2.UseVisualStyleBackColor = true;

this.button2.Click += new System.EventHandler(this.button2_Click);

//

// Form1

//

this.AutoScaleDimensions = new System.Drawing.SizeF(6F, 13F);

this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;

this.ClientSize = new System.Drawing.Size(574, 264);

this.Controls.Add(this.button2);

this.Controls.Add(this.button1);

this.Controls.Add(this.textBox2);

this.Controls.Add(this.textBox1);

this.Controls.Add(this.label3);

this.Controls.Add(this.label2);

this.Controls.Add(this.label1);

this.Name = "Form1";

this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
```

```
this.Text = "Form1";  
  
this.Load += new System.EventHandler(this.Form1_Load);  
  
this.ResumeLayout(false);  
  
this.PerformLayout();  
  
}
```

```
#endregion
```

```
private System.Windows.Forms.Label label1;  
private System.Windows.Forms.Label label2;  
private System.Windows.Forms.Label label3;  
private System.Windows.Forms.TextBox textBox1;  
private System.Windows.Forms.TextBox textBox2;  
private System.Windows.Forms.Button button1;  
private System.Windows.Forms.Button button2;  
  
}  
  
}
```

Main.cs

```
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 Exp7Final
{
    public partial class Main : Form
    {
        public Main()
        {
            InitializeComponent();
        }


        private void button1_Click(object sender, EventArgs e)
        {
            Astudent a = new Astudent();

            this.Hide();

            a.Show();
        }
    }
}
```



```
private void button3_Click(object sender, EventArgs e)
{
    Application.Exit();
}
```

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

Main.Designer.cs

```
namespace Exp7Final
{
    partial class Main
    {
        /// <summary>
        /// Required designer variable.
        /// </summary>
```

```
private System.ComponentModel.IContainer components = null;

/// <summary>
/// Clean up any resources being used.
/// </summary>

/// <param name="disposing">true if managed resources should be disposed; otherwise,
false.</param>

protected override void Dispose(bool disposing)
{
    if (disposing && (components != null))
    {
        components.Dispose();
    }
    base.Dispose(disposing);
}

#region Windows Form Designer generated code

/// <summary>
/// Required method for Designer support - do not modify
/// the contents of this method with the code editor.
/// </summary>
```

```
private void InitializeComponent()
{
    this.button1 = new System.Windows.Forms.Button();
    this.button2 = new System.Windows.Forms.Button();
    this.button3 = new System.Windows.Forms.Button();
    this.SuspendLayout();

    //
    // button1
    //
    this.button1.Location = new System.Drawing.Point(37, 26);
    this.button1.Name = "button1";
    this.button1.Size = new System.Drawing.Size(284, 206);
    this.button1.TabIndex = 0;
    this.button1.Text = "Student";
    this.button1.UseVisualStyleBackColor = true;
    this.button1.Click += new System.EventHandler(this.button1_Click);
    //
    // button2
    //
    this.button2.Location = new System.Drawing.Point(353, 26);
    this.button2.Name = "button2";
    this.button2.Size = new System.Drawing.Size(282, 206);
```

```
this.button2.TabIndex = 1;

this.button2.Text = "Company";

this.button2.UseVisualStyleBackColor = true;

this.button2.Click += new System.EventHandler(this.button2_Click);

//

// button3

//

this.button3.Location = new System.Drawing.Point(37, 259);

this.button3.Name = "button3";

this.button3.Size = new System.Drawing.Size(598, 62);

this.button3.TabIndex = 2;

this.button3.Text = "Logout";

this.button3.UseVisualStyleBackColor = true;

this.button3.Click += new System.EventHandler(this.button3_Click);

//

// Main

//

this.AutoScaleDimensions = new System.Drawing.SizeF(6F, 13F);

this.AutoScaleMode = System.Windows.Forms.AutoScaleModeMode.Font;

this.ClientSize = new System.Drawing.Size(671, 333);

this.Controls.Add(this.button3);

this.Controls.Add(this.button2);
```

```
this.Controls.Add(this.button1);

this.Name = "Main";

this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;

this.Text = "Main";

this.ResumeLayout(false);

}

#endregion

private System.Windows.Forms.Button button1;
private System.Windows.Forms.Button button2;
private System.Windows.Forms.Button button3;
}
}
```

Accompany.cs

```
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 Exp7Final
```

```
{
```

```
    public partial class Acompany : Form
```

```
    {
```

```
        SqlConnection conn = new SqlConnection(@"Data Source=DESKTOP-0E74DKL\SQLEXPRESS;Initial Catalog=placement;Integrated Security=True");
```

```
        public Acompany()
```

```
        {
```

```
            InitializeComponent();
```

```
        }
```

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

```
        {
```

```
            // TODO: This line of code loads data into the 'placementDataSet1.company' table. You can move, or remove it, as needed.
```

```
            this.companyTableAdapter.Fill(this.placementDataSet1.company);
```

```
}
```

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

```
{
```

```
    this.Hide();
```

```
    Main m = new Main();
```

```
    m.Show();
```

```
}
```

```
private void button1_Click(object sender, EventArgs e)
```

```
{
```

```
    conn.Open();
```

```
    SqlCommand cmd = conn.CreateCommand();
```

```
    cmd.CommandType = CommandType.Text;
```

```
    cmd.CommandText = "Insert into company values ('" + textBox1.Text + "','" +  
textBox2.Text + "','" + textBox3.Text + "','" + textBox4.Text + "','" + textBox5.Text + "','" +  
textBox6.Text + "','" + textBox7.Text + "')";
```

```
    cmd.ExecuteNonQuery();
```

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

```
    disp();
```

```
    MessageBox.Show("Inserted Successfully");
```

```
}

public void disp()
{
    conn.Open();

    SqlCommand cmd = conn.CreateCommand();

    cmd.CommandType = CommandType.Text;


    cmd.CommandText = "Select * From company";
    cmd.ExecuteNonQuery();


    DataTable dt = new DataTable();

    SqlDataAdapter da = new SqlDataAdapter(cmd);
    da.Fill(dt);

    dataGridView1.DataSource = dt;

    conn.Close();
}

private void button2_Click(object sender, EventArgs e)
{
    conn.Open();

    SqlCommand cmd = conn.CreateCommand();
```



```
cmd.CommandType = CommandType.Text;

cmd.CommandText = "Delete From company where Id = '" + textBox1.Text + "'";
cmd.ExecuteNonQuery();

conn.Close();

disp();

MessageBox.Show("Deleted Successfully");
}

private void button3_Click(object sender, EventArgs e)
{
    conn.Open();

    SqlCommand cmd1 = conn.CreateCommand();

    cmd1.CommandType = CommandType.Text;

    cmd1.CommandText = "Update company set Name = '" + textBox2.Text +
    "',Designation = '" + textBox3.Text + "', CTC = '" + textBox4.Text + "', Eligiblity = '" +
    textBox5.Text + "', Type = '" + textBox6.Text + "', Date_of_Drive = '" + textBox7.Text + "'
    where Id = '" + textBox1.Text + "'";

    cmd1.ExecuteNonQuery();

    conn.Close();

    disp();

    MessageBox.Show("Record of " + textBox1.Text + " is Updated Successfully");
}
```

```
private void button4_Click(object sender, EventArgs e)
{
    conn.Open();

    SqlCommand cmd = conn.CreateCommand();

    cmd.CommandType = CommandType.Text;

    cmd.CommandText = "Select * From company where Id = '"+textBox1.Text+"'";

    cmd.ExecuteNonQuery();

    DataTable dt = new DataTable();

    SqlDataAdapter da = new SqlDataAdapter(cmd);

    da.Fill(dt);

    dataGridView1.DataSource = dt;

    conn.Close();
}
}
```

Accompany.designer.cs

```
namespace Exp7Final
```

```
{
    partial class Acompany
    {
        /// <summary>
        /// Required designer variable.
        /// </summary>
        private System.ComponentModel.IContainer components = null;

        /// <summary>
        /// Clean up any resources being used.
        /// </summary>
        /// <param name="disposing">true if managed resources should be disposed; otherwise,
        false.</param>
        protected override void Dispose(bool disposing)
        {
            if (disposing && (components != null))
            {
                components.Dispose();
            }
            base.Dispose(disposing);
        }
    }
}
```

```
#region Windows Form Designer generated code
```

```
/// <summary>
```

```
/// Required method for Designer support - do not modify
```

```
/// the contents of this method with the code editor.
```

```
/// </summary>
```

```
private void InitializeComponent()
```

```
{
```

```
    this.components = new System.ComponentModel.Container();
```

```
    this.label1 = new System.Windows.Forms.Label();
```

```
    this.label2 = new System.Windows.Forms.Label();
```

```
    this.label3 = new System.Windows.Forms.Label();
```

```
    this.label4 = new System.Windows.Forms.Label();
```

```
    this.label5 = new System.Windows.Forms.Label();
```

```
    this.label6 = new System.Windows.Forms.Label();
```

```
    this.label7 = new System.Windows.Forms.Label();
```

```
    this.textBox1 = new System.Windows.Forms.TextBox();
```

```
    this.textBox2 = new System.Windows.Forms.TextBox();
```

```
    this.textBox3 = new System.Windows.Forms.TextBox();
```

```
    this.textBox4 = new System.Windows.Forms.TextBox();
```

```
    this.textBox5 = new System.Windows.Forms.TextBox();
```

```
    this.textBox6 = new System.Windows.Forms.TextBox();
```

```
this.textBox7 = new System.Windows.Forms.TextBox();

this.button1 = new System.Windows.Forms.Button();

this.button2 = new System.Windows.Forms.Button();

this.button3 = new System.Windows.Forms.Button();

this.button4 = new System.Windows.Forms.Button();

this.button5 = new System.Windows.Forms.Button();

this.dataGridView1 = new System.Windows.Forms.DataGridview();

this.placementDataSet1 = new Exp7Final.placementDataSet1();

this.companyBindingSource = new
System.Windows.Forms.BindingSource(this.components);

this.companyTableAdapter = new
Exp7Final.placementDataSet1TableAdapters.companyTableAdapter();

this.idDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridviewTextBoxColumn();

this.nameDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridviewTextBoxColumn();

this.designationDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridviewTextBoxColumn();

this.cTCDDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridviewTextBoxColumn();

this.eligiblityDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridviewTextBoxColumn();

this.typeDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridviewTextBoxColumn();

this.dateofDriveDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridviewTextBoxColumn();
```

```
((System.ComponentModel.ISupportInitialize)(this.dataGridView1)).BeginInit();

((System.ComponentModel.ISupportInitialize)(this.placementDataSet1)).BeginInit();

((System.ComponentModel.ISupportInitialize)(this.companyBindingSource)).BeginInit();

    this.SuspendLayout();

    //

    // label1

    //

    this.label1.AutoSize = true;

    this.label1.Location = new System.Drawing.Point(12, 20);

    this.label1.Name = "label1";

    this.label1.Size = new System.Drawing.Size(16, 13);

    this.label1.TabIndex = 0;

    this.label1.Text = "Id";

    //

    // label2

    //

    this.label2.AutoSize = true;

    this.label2.Location = new System.Drawing.Point(12, 45);

    this.label2.Name = "label2";

    this.label2.Size = new System.Drawing.Size(35, 13);

    this.label2.TabIndex = 1;
```

```
this.label2.Text = "Name";  
  
//  
  
// label3  
  
//  
  
this.label3.AutoSize = true;  
  
this.label3.Location = new System.Drawing.Point(12, 72);  
  
this.label3.Name = "label3";  
  
this.label3.Size = new System.Drawing.Size(63, 13);  
  
this.label3.TabIndex = 2;  
  
this.label3.Text = "Designation";  
  
//  
  
// label4  
  
//  
  
this.label4.AutoSize = true;  
  
this.label4.Location = new System.Drawing.Point(12, 101);  
  
this.label4.Name = "label4";  
  
this.label4.Size = new System.Drawing.Size(28, 13);  
  
this.label4.TabIndex = 3;  
  
this.label4.Text = "CTC";  
  
//  
  
// label5  
  
//
```

```
this.label5.AutoSize = true;

this.label5.Location = new System.Drawing.Point(12, 132);

this.label5.Name = "label5";

this.label5.Size = new System.Drawing.Size(44, 13);

this.label5.TabIndex = 4;

this.label5.Text = "Eligibility";

//

// label6

//

this.label6.AutoSize = true;

this.label6.Location = new System.Drawing.Point(12, 160);

this.label6.Name = "label6";

this.label6.Size = new System.Drawing.Size(31, 13);

this.label6.TabIndex = 5;

this.label6.Text = "Type";

//

// label7

//

this.label7.AutoSize = true;

this.label7.Location = new System.Drawing.Point(13, 189);

this.label7.Name = "label7";

this.label7.Size = new System.Drawing.Size(30, 13);
```



```
this.label7.TabIndex = 6;

this.label7.Text = "Date";

//

// textBox1

//

this.textBox1.Location = new System.Drawing.Point(102, 17);

this.textBox1.Name = "textBox1";

this.textBox1.Size = new System.Drawing.Size(190, 20);

this.textBox1.TabIndex = 7;

//

// textBox2

//

this.textBox2.Location = new System.Drawing.Point(102, 43);

this.textBox2.Name = "textBox2";

this.textBox2.Size = new System.Drawing.Size(190, 20);

this.textBox2.TabIndex = 8;

//

// textBox3

//

this.textBox3.Location = new System.Drawing.Point(102, 72);

this.textBox3.Name = "textBox3";

this.textBox3.Size = new System.Drawing.Size(190, 20);
```

```
this.textBox3.TabIndex = 9;

//

// textBox4

//

this.textBox4.Location = new System.Drawing.Point(102, 101);

this.textBox4.Name = "textBox4";

this.textBox4.Size = new System.Drawing.Size(190, 20);

this.textBox4.TabIndex = 10;

//

// textBox5

//

this.textBox5.Location = new System.Drawing.Point(102, 129);

this.textBox5.Name = "textBox5";

this.textBox5.Size = new System.Drawing.Size(190, 20);

this.textBox5.TabIndex = 11;

//

// textBox6

//

this.textBox6.Location = new System.Drawing.Point(102, 160);

this.textBox6.Name = "textBox6";

this.textBox6.Size = new System.Drawing.Size(190, 20);

this.textBox6.TabIndex = 12;
```

```
//  
  
// textBox7  
  
//  
  
this.textBox7.Location = new System.Drawing.Point(102, 189);  
  
this.textBox7.Name = "textBox7";  
  
this.textBox7.Size = new System.Drawing.Size(190, 20);  
  
this.textBox7.TabIndex = 13;  
  
//  
  
// button1  
  
//  
  
this.button1.Location = new System.Drawing.Point(15, 235);  
  
this.button1.Name = "button1";  
  
this.button1.Size = new System.Drawing.Size(75, 23);  
  
this.button1.TabIndex = 14;  
  
this.button1.Text = "Insert";  
  
this.button1.UseVisualStyleBackColor = true;  
  
this.button1.Click += new System.EventHandler(this.button1_Click);  
  
//  
  
// button2  
  
//  
  
this.button2.Location = new System.Drawing.Point(115, 235);  
  
this.button2.Name = "button2";
```

```
this.button2.Size = new System.Drawing.Size(75, 23);

this.button2.TabIndex = 15;

this.button2.Text = "Delete";

this.button2.UseVisualStyleBackColor = true;

this.button2.Click += new System.EventHandler(this.button2_Click);

//

// button3

//

this.button3.Location = new System.Drawing.Point(217, 235);

this.button3.Name = "button3";

this.button3.Size = new System.Drawing.Size(75, 23);

this.button3.TabIndex = 16;

this.button3.Text = "Update";

this.button3.UseVisualStyleBackColor = true;

this.button3.Click += new System.EventHandler(this.button3_Click);

//

// button4

//

this.button4.Location = new System.Drawing.Point(60, 276);

this.button4.Name = "button4";

this.button4.Size = new System.Drawing.Size(75, 23);

this.button4.TabIndex = 17;
```

```
this.button4.Text = "Search";

this.button4.UseVisualStyleBackColor = true;

this.button4.Click += new System.EventHandler(this.button4_Click);

//

// button5

//

this.button5.Location = new System.Drawing.Point(174, 276);

this.button5.Name = "button5";

this.button5.Size = new System.Drawing.Size(75, 23);

this.button5.TabIndex = 18;

this.button5.Text = "Exit";

this.button5.UseVisualStyleBackColor = true;

this.button5.Click += new System.EventHandler(this.button5_Click);

//

// dataGridView1

//

this.dataGridView1.AutoGenerateColumns = false;

this.dataGridView1.ColumnHeadersHeightSizeMode =
System.Windows.Forms.DataGridViewColumnHeadersHeightSizeMode.AutoSize;

this.dataGridView1.Columns.AddRange(new
System.Windows.Forms.DataGridViewColumn[] {

    this.idDataGridViewTextBoxColumn,

    this.nameDataGridViewTextBoxColumn,
```

```
this.designationDataGridViewTextBoxColumn,  
this.cTCDDataGridViewTextBoxColumn,  
this.eligiblityDataGridViewTextBoxColumn,  
this.typeDataGridViewTextBoxColumn,  
this.dateofDriveDataGridViewTextBoxColumn});  
  
this.dataGridView1.DataSource = this.companyBindingSource;  
this.dataGridView1.Location = new System.Drawing.Point(320, 17);  
this.dataGridView1.Name = "dataGridView1";  
this.dataGridView1.Size = new System.Drawing.Size(742, 282);  
this.dataGridView1.TabIndex = 19;  
  
//  
// placementDataSet1  
  
//  
this.placementDataSet1.DataSetName = "placementDataSet1";  
  
this.placementDataSet1.SchemaSerializationMode =  
System.Data.SchemaSerializationMode.IncludeSchema;  
  
//  
// companyBindingSource  
  
//  
this.companyBindingSource.DataMember = "company";  
this.companyBindingSource.DataSource = this.placementDataSet1;  
  
//
```

```
// companyTableAdapter
//
this.companyTableAdapter.ClearBeforeFill = true;
//
// idDataGridViewTextBoxColumn
//
this.idDataGridViewTextBoxColumn.DataPropertyName = "Id";
this.idDataGridViewTextBoxColumn.HeaderText = "Id";
this.idDataGridViewTextBoxColumn.Name = "idDataGridViewTextBoxColumn";
//
// nameDataGridViewTextBoxColumn
//
this.nameDataGridViewTextBoxColumn.DataPropertyName = "Name";
this.nameDataGridViewTextBoxColumn.HeaderText = "Name";
this.nameDataGridViewTextBoxColumn.Name =
"nameDataGridViewTextBoxColumn";
//
// designationDataGridViewTextBoxColumn
//
this.designationDataGridViewTextBoxColumn.DataPropertyName = "Designation";
this.designationDataGridViewTextBoxColumn.HeaderText = "Designation";
this.designationDataGridViewTextBoxColumn.Name =
"designationDataGridViewTextBoxColumn";
```

```
//  
  
// cTCDataGridViewTextBoxColumn  
  
//  
  
this.cTCDataGridViewTextBoxColumn.DataPropertyName = "CTC";  
this.cTCDataGridViewTextBoxColumn.HeaderText = "CTC";  
this.cTCDataGridViewTextBoxColumn.Name = "cTCDataGridViewTextBoxColumn";  
  
//  
  
// eligibilityDataGridViewTextBoxColumn  
  
//  
  
this.eligibilityDataGridViewTextBoxColumn.DataPropertyName = "Eligibility";  
this.eligibilityDataGridViewTextBoxColumn.HeaderText = "Eligibility";  
this.eligibilityDataGridViewTextBoxColumn.Name =  
"eligibilityDataGridViewTextBoxColumn";  
  
//  
  
// typeDataGridViewTextBoxColumn  
  
//  
  
this.typeDataGridViewTextBoxColumn.DataPropertyName = "Type";  
this.typeDataGridViewTextBoxColumn.HeaderText = "Type";  
this.typeDataGridViewTextBoxColumn.Name = "typeDataGridViewTextBoxColumn";  
  
//  
  
// dateofDriveDataGridViewTextBoxColumn  
  
//
```



```
this.dateofDriveDataGridViewTextBoxColumn.DataPropertyName = "Date_of_Drive";  
  
this.dateofDriveDataGridViewTextBoxColumn.HeaderText = "Date_of_Drive";  
  
this.dateofDriveDataGridViewTextBoxColumn.Name =  
"dateofDriveDataGridViewTextBoxColumn";  
  
//  
  
// Acompamy  
  
//  
  
this.AutoScaleDimensions = new System.Drawing.SizeF(6F, 13F);  
  
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;  
  
this.ClientSize = new System.Drawing.Size(1097, 316);  
  
this.Controls.Add(this.dataGridView1);  
  
this.Controls.Add(this.button5);  
  
this.Controls.Add(this.button4);  
  
this.Controls.Add(this.button3);  
  
this.Controls.Add(this.button2);  
  
this.Controls.Add(this.button1);  
  
this.Controls.Add(this.textBox7);  
  
this.Controls.Add(this.textBox6);  
  
this.Controls.Add(this.textBox5);  
  
this.Controls.Add(this.textBox4);  
  
this.Controls.Add(this.textBox3);  
  
this.Controls.Add(this.textBox2);
```

```
this.Controls.Add(this.textBox1);

this.Controls.Add(this.label7);

this.Controls.Add(this.label6);

this.Controls.Add(this.label5);

this.Controls.Add(this.label4);

this.Controls.Add(this.label3);

this.Controls.Add(this.label2);

this.Controls.Add(this.label1);

this.Name = "Acompany";

this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;

this.Text = "Acompany";

this.Load += new System.EventHandler(this.Acompany_Load);

((System.ComponentModel.ISupportInitialize)(this.dataGridView1)).EndInit();

((System.ComponentModel.ISupportInitialize)(this.placementDataSet1)).EndInit();

((System.ComponentModel.ISupportInitialize)(this.companyBindingSource)).EndInit();

this.ResumeLayout(false);

this.PerformLayout();

}

#endregion
```

```
private System.Windows.Forms.Label label1;  
private System.Windows.Forms.Label label2;  
private System.Windows.Forms.Label label3;  
private System.Windows.Forms.Label label4;  
private System.Windows.Forms.Label label5;  
private System.Windows.Forms.Label label6;  
private System.Windows.Forms.Label label7;  
private System.Windows.Forms.TextBox textBox1;  
private System.Windows.Forms.TextBox textBox2;  
private System.Windows.Forms.TextBox textBox3;  
private System.Windows.Forms.TextBox textBox4;  
private System.Windows.Forms.TextBox textBox5;  
private System.Windows.Forms.TextBox textBox6;  
private System.Windows.Forms.TextBox textBox7;  
private System.Windows.Forms.Button button1;  
private System.Windows.Forms.Button button2;  
private System.Windows.Forms.Button button3;  
private System.Windows.Forms.Button button4;  
private System.Windows.Forms.Button button5;  
private System.Windows.Forms.DataGridView dataGridView1;  
private placementDataSet1 placementDataSet1;  
private System.Windows.Forms.BindingSource companyBindingSource;
```

```
private placementDataSet1TableAdapters.companyTableAdapter companyTableAdapter;  
  
private System.Windows.Forms.DataGridTextBoxColumn  
idDataGridViewTextBoxColumn;  
  
private System.Windows.Forms.DataGridTextBoxColumn  
nameDataGridViewTextBoxColumn;  
  
private System.Windows.Forms.DataGridTextBoxColumn  
designationDataGridViewTextBoxColumn;  
  
private System.Windows.Forms.DataGridTextBoxColumn  
cTCDataGridViewTextBoxColumn;  
  
private System.Windows.Forms.DataGridTextBoxColumn  
eligibilityDataGridViewTextBoxColumn;  
  
private System.Windows.Forms.DataGridTextBoxColumn  
typeDataGridViewTextBoxColumn;  
  
private System.Windows.Forms.DataGridTextBoxColumn  
dateofDriveDataGridViewTextBoxColumn;  
  
}  
  
}
```

Astudent.cs

```
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 Exp7Final
```

```
{
```

```
    public partial class Astudent : Form
```

```
    {
```

```
        SqlConnection conn = new SqlConnection(@"Data Source=DESKTOP-0E74DKL\SQLEXPRESS;Initial Catalog=placement;Integrated Security=True");
```

```
        public Astudent()
```

```
        {
```

```
            InitializeComponent();
```

```
        }
```

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

```
        {
```

```
            // TODO: This line of code loads data into the 'placementDataSet.student1' table. You can move, or remove it, as needed.
```

```
            this.student1TableAdapter.Fill(this.placementDataSet.student1);
```

```
            disp();
```

```
        }
```

```
private void button1_Click(object sender, EventArgs e)
{
    conn.Open();

    SqlCommand cmd = conn.CreateCommand();

    cmd.CommandType = CommandType.Text;

    cmd.CommandText = "Insert into login (id, pass) values ('" + textBox1.Text + "','" +
textBox1.Text + "')";

    cmd.ExecuteNonQuery();

    SqlCommand cmd1 = conn.CreateCommand();

    cmd1.CommandType = CommandType.Text;

    cmd1.CommandText = "Insert into student1(regno, name, dept, cgpa, arrear) values ('" +
textBox1.Text + "','" + textBox2.Text + "','" + textBox3.Text + "','" + textBox4.Text + "','" +
int.Parse(textBox5.Text) + "')";

    cmd1.ExecuteNonQuery();

    conn.Close();

    disp();

    MessageBox.Show("Inserted Successfully");

}
```

```
public void disp()
{
    conn.Open();

    SqlCommand cmd = conn.CreateCommand();

    cmd.CommandType = CommandType.Text;

    cmd.CommandText = "Select * From student1";

    cmd.ExecuteNonQuery();

    DataTable dt = new DataTable();

    SqlDataAdapter da = new SqlDataAdapter(cmd);

    da.Fill(dt);

    dataGridView1.DataSource = dt;

    conn.Close();
}

private void button5_Click(object sender, EventArgs e)
{
    this.Hide();

    Main m = new Main();
```

```
m.Show();  
  
}  
  
private void button3_Click(object sender, EventArgs e)  
{  
    conn.Open();  
    SqlCommand cmd = conn.CreateCommand();  
    cmd.CommandType = CommandType.Text;  
  
    cmd.CommandText = "Delete From login where id = '"+textBox1.Text+'";  
    cmd.ExecuteNonQuery();  
  
    SqlCommand cmd1 = conn.CreateCommand();  
    cmd1.CommandType = CommandType.Text;  
    cmd1.CommandText = "Delete From student1 where regno = '" + textBox1.Text + "'";  
    cmd1.ExecuteNonQuery();  
    conn.Close();  
    disp();  
    MessageBox.Show("Deleted Successfully");  
  
}
```



```
private void button2_Click(object sender, EventArgs e)
{
    conn.Open();

    SqlCommand cmd1 = conn.CreateCommand();

    cmd1.CommandType = CommandType.Text;

    cmd1.CommandText = "Update student1 set  name = '" + textBox2.Text + "',dept = '" +
textBox3.Text + "', cgpa = '" + textBox4.Text + "', arrear = '" + int.Parse(textBox5.Text) + '"
where regno = '"+textBox1.Text+'";

    cmd1.ExecuteNonQuery();

    conn.Close();

    disp();

    MessageBox.Show("Record of '"+textBox1.Text+" is Updated Successfully");
}

private void button4_Click(object sender, EventArgs e)
{
    conn.Open();

    SqlCommand cmd = conn.CreateCommand();

    cmd.CommandType = CommandType.Text;

    cmd.CommandText = "Select * From student1 where regno = '"+textBox1.Text+'";

    cmd.ExecuteNonQuery();
```

```
        DataTable dt = new DataTable();

        SqlDataAdapter da = new SqlDataAdapter(cmd);

        da.Fill(dt);

        dataGridView1.DataSource = dt;

        conn.Close();
    }
}
```

Astudent.designer.cs

```
namespace Exp7Final
{
    partial class Astudent
    {
        /// <summary>
        /// Required designer variable.
        /// </summary>

        private System.ComponentModel.IContainer components = null;
```

```
/// <summary>

/// Clean up any resources being used.

/// </summary>

/// <param name="disposing">true if managed resources should be disposed; otherwise,
false.</param>

protected override void Dispose(bool disposing)
{
    if (disposing && (components != null))
    {
        components.Dispose();
    }
    base.Dispose(disposing);
}

#region Windows Form Designer generated code

/// <summary>

/// Required method for Designer support - do not modify
/// the contents of this method with the code editor.

/// </summary>

private void InitializeComponent()
{

```

```
this.components = new System.ComponentModel.Container();

this.label1 = new System.Windows.Forms.Label();

this.label2 = new System.Windows.Forms.Label();

this.label3 = new System.Windows.Forms.Label();

this.label4 = new System.Windows.Forms.Label();

this.label5 = new System.Windows.Forms.Label();

this.textBox1 = new System.Windows.Forms.TextBox();

this.textBox2 = new System.Windows.Forms.TextBox();

this.textBox3 = new System.Windows.Forms.TextBox();

this.textBox4 = new System.Windows.Forms.TextBox();

this.textBox5 = new System.Windows.Forms.TextBox();

this.button1 = new System.Windows.Forms.Button();

this.button2 = new System.Windows.Forms.Button();

this.button3 = new System.Windows.Forms.Button();

this.button4 = new System.Windows.Forms.Button();

this.button5 = new System.Windows.Forms.Button();

this.dataGridView1 = new System.Windows.Forms.DataGridview();

this.placementDataSet = new Exp7Final.placementDataSet();

this.student1BindingSource = new
System.Windows.Forms.BindingSource(this.components);

this.student1TableAdapter = new
Exp7Final.placementDataSetTableAdapters.student1TableAdapter();
```

```
this.regnoDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridViewTextBoxColumn();

this.nameDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridViewTextBoxColumn();

this.deptDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridViewTextBoxColumn();

this.cgpaDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridViewTextBoxColumn();

this.arrearDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridViewTextBoxColumn();

((System.ComponentModel.ISupportInitialize)(this.dataGridView1)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.placementDataSet)).BeginInit();
((System.ComponentModel.ISupportInitialize)(this.student1BindingSource)).BeginInit();
this.SuspendLayout();

//

// label1

//

this.label1.AutoSize = true;

this.label1.Location = new System.Drawing.Point(34, 42);

this.label1.Name = "label1";

this.label1.Size = new System.Drawing.Size(44, 13);

this.label1.TabIndex = 0;

this.label1.Text = "Reg No";

//
```

```
// label2

//
this.label2.AutoSize = true;
this.label2.Location = new System.Drawing.Point(34, 70);
this.label2.Name = "label2";
this.label2.Size = new System.Drawing.Size(35, 13);
this.label2.TabIndex = 1;
this.label2.Text = "Name";

//
// label3

//
this.label3.AutoSize = true;
this.label3.Location = new System.Drawing.Point(34, 99);
this.label3.Name = "label3";
this.label3.Size = new System.Drawing.Size(62, 13);
this.label3.TabIndex = 2;
this.label3.Text = "Department";

//
// label4

//
this.label4.AutoSize = true;
this.label4.Location = new System.Drawing.Point(34, 123);
```

```
this.label4.Name = "label4";

this.label4.Size = new System.Drawing.Size(32, 13);

this.label4.TabIndex = 3;

this.label4.Text = "Cgpa";

//

// label5

//

this.label5.AutoSize = true;

this.label5.Location = new System.Drawing.Point(34, 152);

this.label5.Name = "label5";

this.label5.Size = new System.Drawing.Size(35, 13);

this.label5.TabIndex = 4;

this.label5.Text = "Arrear";

//

// textBox1

//

this.textBox1.Location = new System.Drawing.Point(111, 42);

this.textBox1.Name = "textBox1";

this.textBox1.Size = new System.Drawing.Size(141, 20);

this.textBox1.TabIndex = 5;

//

// textBox2
```

```
//  
  
this.textBox2.Location = new System.Drawing.Point(111, 70);  
  
this.textBox2.Name = "textBox2";  
  
this.textBox2.Size = new System.Drawing.Size(141, 20);  
  
this.textBox2.TabIndex = 6;  
  
//  
  
// textBox3  
  
//  
  
this.textBox3.Location = new System.Drawing.Point(111, 99);  
  
this.textBox3.Name = "textBox3";  
  
this.textBox3.Size = new System.Drawing.Size(141, 20);  
  
this.textBox3.TabIndex = 7;  
  
//  
  
// textBox4  
  
//  
  
this.textBox4.Location = new System.Drawing.Point(111, 126);  
  
this.textBox4.Name = "textBox4";  
  
this.textBox4.Size = new System.Drawing.Size(141, 20);  
  
this.textBox4.TabIndex = 8;  
  
//  
  
// textBox5  
  
//
```



```
this.textBox5.Location = new System.Drawing.Point(111, 153);

this.textBox5.Name = "textBox5";

this.textBox5.Size = new System.Drawing.Size(141, 20);

this.textBox5.TabIndex = 9;

//

// button1

//

this.button1.Location = new System.Drawing.Point(37, 207);

this.button1.Name = "button1";

this.button1.Size = new System.Drawing.Size(75, 23);

this.button1.TabIndex = 10;

this.button1.Text = "Insert";

this.button1.UseVisualStyleBackColor = true;

this.button1.Click += new System.EventHandler(this.button1_Click);

//

// button2

//

this.button2.Location = new System.Drawing.Point(132, 207);

this.button2.Name = "button2";

this.button2.Size = new System.Drawing.Size(75, 23);

this.button2.TabIndex = 11;

this.button2.Text = "Update";
```

```
this.button2.UseVisualStyleBackColor = true;

this.button2.Click += new System.EventHandler(this.button2_Click);

//

// button3

//

this.button3.Location = new System.Drawing.Point(236, 207);

this.button3.Name = "button3";

this.button3.Size = new System.Drawing.Size(75, 23);

this.button3.TabIndex = 12;

this.button3.Text = "Delete";

this.button3.UseVisualStyleBackColor = true;

this.button3.Click += new System.EventHandler(this.button3_Click);

//

// button4

//

this.button4.Location = new System.Drawing.Point(79, 256);

this.button4.Name = "button4";

this.button4.Size = new System.Drawing.Size(75, 23);

this.button4.TabIndex = 13;

this.button4.Text = "Search";

this.button4.UseVisualStyleBackColor = true;

this.button4.Click += new System.EventHandler(this.button4_Click);
```

```
//  
  
// button5  
  
//  
  
this.button5.Location = new System.Drawing.Point(200, 256);  
  
this.button5.Name = "button5";  
  
this.button5.Size = new System.Drawing.Size(75, 23);  
  
this.button5.TabIndex = 14;  
  
this.button5.Text = "Exit";  
  
this.button5.UseVisualStyleBackColor = true;  
  
this.button5.Click += new System.EventHandler(this.button5_Click);  
  
//  
  
// dataGridView1  
  
//  
  
this.dataGridView1.AutoGenerateColumns = false;  
  
this.dataGridView1.ColumnHeadersHeightSizeMode =  
System.Windows.Forms.DataGridViewColumnHeadersHeightSizeMode.AutoSize;  
  
this.dataGridView1.Columns.AddRange(new  
System.Windows.Forms.DataGridViewColumn[] {  
  
    this.regnoDataGridViewTextBoxColumn,  
  
    this.nameDataGridViewTextBoxColumn,  
  
    this.deptDataGridViewTextBoxColumn,  
  
    this.cgpaDataGridViewTextBoxColumn,  
  
    this.arrearDataGridViewTextBoxColumn});
```

```
this.dataGridView1.DataSource = this.student1BindingSource;

this.dataGridView1.Location = new System.Drawing.Point(337, 18);

this.dataGridView1.Name = "dataGridView1";

this.dataGridView1.Size = new System.Drawing.Size(544, 261);

this.dataGridView1.TabIndex = 15;

//

// placementDataSet

//

this.placementDataSet.DataSetName = "placementDataSet";

this.placementDataSet.SchemaSerializationMode =
System.Data.SchemaSerializationMode.IncludeSchema;

//

// student1BindingSource

//

this.student1BindingSource.DataMember = "student1";

this.student1BindingSource.DataSource = this.placementDataSet;

//

// student1TableAdapter

//

this.student1TableAdapter.ClearBeforeFill = true;

//

// regnoDataGridViewTextBoxColumn
```

```
//  
  
this.regnoDataGridViewTextBoxColumn.DataPropertyName = "regno";  
  
this.regnoDataGridViewTextBoxColumn.HeaderText = "regno";  
  
this.regnoDataGridViewTextBoxColumn.Name =  
"regnoDataGridViewTextBoxColumn";  
  
//  
  
// nameDataGridViewTextBoxColumn  
  
//  
  
this.nameDataGridViewTextBoxColumn.DataPropertyName = "name";  
  
this.nameDataGridViewTextBoxColumn.HeaderText = "name";  
  
this.nameDataGridViewTextBoxColumn.Name =  
"nameDataGridViewTextBoxColumn";  
  
//  
  
// deptDataGridViewTextBoxColumn  
  
//  
  
this.deptDataGridViewTextBoxColumn.DataPropertyName = "dept";  
  
this.deptDataGridViewTextBoxColumn.HeaderText = "dept";  
  
this.deptDataGridViewTextBoxColumn.Name = "deptDataGridViewTextBoxColumn";  
  
//  
  
// cgpaDataGridViewTextBoxColumn  
  
//  
  
this.cgpaDataGridViewTextBoxColumn.DataPropertyName = "cgpa";  
  
this.cgpaDataGridViewTextBoxColumn.HeaderText = "cgpa";
```

```
this.cgpaDataGridViewTextBoxColumn.Name = "cgpaDataGridViewTextBoxColumn";  
  
//  
  
// arrearDataGridViewTextBoxColumn  
  
//  
  
this.arrearDataGridViewTextBoxColumn.DataPropertyName = "arrear";  
  
this.arrearDataGridViewTextBoxColumn.HeaderText = "arrear";  
  
this.arrearDataGridViewTextBoxColumn.Name =  
"arrearDataGridViewTextBoxColumn";  
  
//  
  
// Astudent  
  
//  
  
this.AutoScaleDimensions = new System.Drawing.SizeF(6F, 13F);  
  
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;  
  
this.ClientSize = new System.Drawing.Size(927, 334);  
  
this.Controls.Add(this.dataGridView1);  
  
this.Controls.Add(this.button5);  
  
this.Controls.Add(this.button4);  
  
this.Controls.Add(this.button3);  
  
this.Controls.Add(this.button2);  
  
this.Controls.Add(this.button1);  
  
this.Controls.Add(this.textBox5);  
  
this.Controls.Add(this.textBox4);
```

```
this.Controls.Add(this.textBox3);  
this.Controls.Add(this.textBox2);  
this.Controls.Add(this.textBox1);  
this.Controls.Add(this.label5);  
this.Controls.Add(this.label4);  
this.Controls.Add(this.label3);  
this.Controls.Add(this.label2);  
this.Controls.Add(this.label1);  
this.Name = "Astudent";  
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;  
this.Text = "Student Page";  
this.Load += new System.EventHandler(this.Astudent_Load);  
((System.ComponentModel.ISupportInitialize)(this.dataGridView1)).EndInit();  
((System.ComponentModel.ISupportInitialize)(this.placementDataSet)).EndInit();  
((System.ComponentModel.ISupportInitialize)(this.student1BindingSource)).EndInit();  
this.ResumeLayout(false);  
this.PerformLayout();  
  
}  
  
#endregion
```

```
private System.Windows.Forms.Label label1;
private System.Windows.Forms.Label label2;
private System.Windows.Forms.Label label3;
private System.Windows.Forms.Label label4;
private System.Windows.Forms.Label label5;
private System.Windows.Forms.TextBox textBox1;
private System.Windows.Forms.TextBox textBox2;
private System.Windows.Forms.TextBox textBox3;
private System.Windows.Forms.TextBox textBox4;
private System.Windows.Forms.TextBox textBox5;
private System.Windows.Forms.Button button1;
private System.Windows.Forms.Button button2;
private System.Windows.Forms.Button button3;
private System.Windows.Forms.Button button4;
private System.Windows.Forms.Button button5;
private System.Windows.Forms.DataGridView dataGridView1;
private placementDataSet placementDataSet;
private System.Windows.Forms.BindingSource student1BindingSource;
private placementDataSetTableAdapters.student1TableAdapter student1TableAdapter;
private System.Windows.Forms.DataGridViewTextBoxColumn
regnoDataGridViewTextBoxColumn;
private System.Windows.Forms.DataGridViewTextBoxColumn
nameDataGridViewTextBoxColumn;
```



```
private System.Windows.Forms.DataGridViewTextBoxColumn
deptDataGridViewTextBoxColumn;

private System.Windows.Forms.DataGridViewTextBoxColumn
cgpaDataGridViewTextBoxColumn;

private System.Windows.Forms.DataGridViewTextBoxColumn
arrearDataGridViewTextBoxColumn;

}

}
```

Program.cs

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace Exp7Final
{
    static class Program
    {
        /// <summary>
        /// The main entry point for the application.
        /// </summary>

        [STAThread]
```

```
static void Main()
{
    Application.EnableVisualStyles();
    Application.SetCompatibleTextRenderingDefault(false);
    Application.Run(new Form1());
}
}
```

Studentmain.cs

```
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 Exp7Final
{
```

```
public partial class Studentmain : Form
```

```
{
```

```
    public Studentmain()
```

```
    {
```

```
        InitializeComponent();
```

```
    }
```

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

```
    {
```

```
        // TODO: This line of code loads data into the 'placementDataSet3.company' table. You  
        can move, or remove it, as needed.
```

```
        this.companyTableAdapter1.Fill(this.placementDataSet3.company);
```

```
        // TODO: This line of code loads data into the 'placementDataSet2.company' table. You  
        can move, or remove it, as needed.
```

```
    }
```

```
    private void button1_Click(object sender, EventArgs e)
```

```
    {
```

```
        Application.Exit();
```

```
    }
```

```
}
```

```
}
```

Studentmain.designer.cs

```
namespace Exp7Final
```

```
{
```

```
    partial class Studentmain
```

```
    {
```

```
        /// <summary>
```

```
        /// Required designer variable.
```

```
        /// </summary>
```

```
        private System.ComponentModel.IContainer components = null;
```

```
        /// <summary>
```

```
        /// Clean up any resources being used.
```

```
        /// </summary>
```

```
        /// <param name="disposing">true if managed resources should be disposed; otherwise,  
false.</param>
```

```
        protected override void Dispose(bool disposing)
```

```
        {
```

```
            if (disposing && (components != null))
```

```
            {
```

```
                components.Dispose();
```

```
            }
```

```
        base.Dispose(disposing);
    }

    #region Windows Form Designer generated code

    /// <summary>
    /// Required method for Designer support - do not modify
    /// the contents of this method with the code editor.
    /// </summary>

    private void InitializeComponent()
    {
        this.components = new System.ComponentModel.Container();
        this.placementDataSet2 = new Exp7Final.placementDataSet2();
        this.companyBindingSource = new
System.Windows.Forms.BindingSource(this.components);
        this.companyTableAdapter = new
Exp7Final.placementDataSet2TableAdapters.companyTableAdapter();
        this.button1 = new System.Windows.Forms.Button();
        this.dataGridView1 = new System.Windows.Forms.DataGridview();
        this.placementDataSet3 = new Exp7Final.placementDataSet3();
        this.companyBindingSource1 = new
System.Windows.Forms.BindingSource(this.components);
        this.companyTableAdapter1 = new
Exp7Final.placementDataSet3TableAdapters.companyTableAdapter();
```

```
this.idDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridViewTextBoxColumn();

this.nameDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridViewTextBoxColumn();

this.designationDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridViewTextBoxColumn();

this.cTCDDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridViewTextBoxColumn();

this.eligibilityDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridViewTextBoxColumn();

this.typeDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridViewTextBoxColumn();

this.dateofDriveDataGridViewTextBoxColumn = new
System.Windows.Forms.DataGridViewTextBoxColumn();

((System.ComponentModel.ISupportInitialize)(this.placementDataSet2)).BeginInit();

((System.ComponentModel.ISupportInitialize)(this.companyBindingSource)).BeginInit();

((System.ComponentModel.ISupportInitialize)(this.dataGridView1)).BeginInit();

((System.ComponentModel.ISupportInitialize)(this.placementDataSet3)).BeginInit();

((System.ComponentModel.ISupportInitialize)(this.companyBindingSource1)).BeginInit();

this.SuspendLayout();

//

// placementDataSet2

//

this.placementDataSet2.DataSetName = "placementDataSet2";
```

```
this.placementDataSet2.SchemaSerializationMode =  
System.Data.SchemaSerializationMode.IncludeSchema;  
  
//  
  
// companyBindingSource  
  
//  
  
this.companyBindingSource.DataMember = "company";  
  
this.companyBindingSource.DataSource = this.placementDataSet2;  
  
//  
  
// companyTableAdapter  
  
//  
  
this.companyTableAdapter.ClearBeforeFill = true;  
  
//  
  
// button1  
  
//  
  
this.button1.Location = new System.Drawing.Point(378, 306);  
  
this.button1.Name = "button1";  
  
this.button1.Size = new System.Drawing.Size(75, 23);  
  
this.button1.TabIndex = 1;  
  
this.button1.Text = "Logout";  
  
this.button1.UseVisualStyleBackColor = true;  
  
this.button1.Click += new System.EventHandler(this.button1_Click);  
  
//
```

```
// dataGridView1

//

this.dataGridView1.AutoGenerateColumns = false;

this.dataGridView1.ColumnHeadersHeightSizeMode =
System.Windows.Forms.DataGridViewColumnHeadersHeightSizeMode.AutoSize;

this.dataGridView1.Columns.AddRange(new
System.Windows.Forms.DataGridViewColumn[] {

    this.idDataGridViewTextBoxColumn,

    this.nameDataGridViewTextBoxColumn,

    this.designationDataGridViewTextBoxColumn,

    this.cTCDDataGridViewTextBoxColumn,

    this.eligibilityDataGridViewTextBoxColumn,

    this.typeDataGridViewTextBoxColumn,

    this.dateofDriveDataGridViewTextBoxColumn});

this.dataGridView1.DataSource = this.companyBindingSource1;

this.dataGridView1.Location = new System.Drawing.Point(34, 27);

this.dataGridView1.Name = "dataGridView1";

this.dataGridView1.Size = new System.Drawing.Size(742, 252);

this.dataGridView1.TabIndex = 2;

//

// placementDataSet3

//

this.placementDataSet3.DataSetName = "placementDataSet3";
```



```
this.placementDataSet3.SchemaSerializationMode =  
System.Data.SchemaSerializationMode.IncludeSchema;  
  
//  
  
// companyBindingSource1  
  
//  
  
this.companyBindingSource1.DataMember = "company";  
  
this.companyBindingSource1.DataSource = this.placementDataSet3;  
  
//  
  
// companyTableAdapter1  
  
//  
  
this.companyTableAdapter1.ClearBeforeFill = true;  
  
//  
  
// idDataGridViewTextBoxColumn  
  
//  
  
this.idDataGridViewTextBoxColumn.DataPropertyName = "Id";  
  
this.idDataGridViewTextBoxColumn.HeaderText = "Id";  
  
this.idDataGridViewTextBoxColumn.Name = "idDataGridViewTextBoxColumn";  
  
//  
  
// nameDataGridViewTextBoxColumn  
  
//  
  
this.nameDataGridViewTextBoxColumn.DataPropertyName = "Name";  
  
this.nameDataGridViewTextBoxColumn.HeaderText = "Name";
```

```
this.nameDataGridViewTextBoxColumn.Name =
"nameDataGridViewTextBoxColumn";

//

// designationDataGridViewTextBoxColumn

//

this.designationDataGridViewTextBoxColumn.DataPropertyName = "Designation";

this.designationDataGridViewTextBoxColumn.HeaderText = "Designation";

this.designationDataGridViewTextBoxColumn.Name =
"designationDataGridViewTextBoxColumn";

//

// cTCDDataGridViewTextBoxColumn

//

this.cTCDDataGridViewTextBoxColumn.DataPropertyName = "CTC";

this.cTCDDataGridViewTextBoxColumn.HeaderText = "CTC";

this.cTCDDataGridViewTextBoxColumn.Name = "cTCDDataGridViewTextBoxColumn";

//

// eligibilityDataGridViewTextBoxColumn

//

this.eligibilityDataGridViewTextBoxColumn.DataPropertyName = "Eligibility";

this.eligibilityDataGridViewTextBoxColumn.HeaderText = "Eligibility";

this.eligibilityDataGridViewTextBoxColumn.Name =
"eligibilityDataGridViewTextBoxColumn";

//
```

```
// typeDataGridViewTextBoxColumn
//
this.typeDataGridViewTextBoxColumn.DataPropertyName = "Type";
this.typeDataGridViewTextBoxColumn.HeaderText = "Type";
this.typeDataGridViewTextBoxColumn.Name = "typeDataGridViewTextBoxColumn";
//
// dateofDriveDataGridViewTextBoxColumn
//
this.dateofDriveDataGridViewTextBoxColumn.DataPropertyName = "Date_of_Drive";
this.dateofDriveDataGridViewTextBoxColumn.HeaderText = "Date_of_Drive";
this.dateofDriveDataGridViewTextBoxColumn.Name =
"dateofDriveDataGridViewTextBoxColumn";
//
// Studentmain
//
this.AutoScaleDimensions = new System.Drawing.SizeF(6F, 13F);
this.AutoScaleMode = System.Windows.Forms.AutoScaleMode.Font;
this.ClientSize = new System.Drawing.Size(805, 359);
this.Controls.Add(this.dataGridView1);
this.Controls.Add(this.button1);
this.Name = "Studentmain";
this.StartPosition = System.Windows.Forms.FormStartPosition.CenterScreen;
```

```
this.Text = "Studentmain";

this.Load += new System.EventHandler(this.Studentmain_Load);

((System.ComponentModel.ISupportInitialize)(this.placementDataSet2)).EndInit();

((System.ComponentModel.ISupportInitialize)(this.companyBindingSource)).EndInit();

((System.ComponentModel.ISupportInitialize)(this.dataGridView1)).EndInit();

((System.ComponentModel.ISupportInitialize)(this.placementDataSet3)).EndInit();

((System.ComponentModel.ISupportInitialize)(this.companyBindingSource1)).EndInit();

this.ResumeLayout(false);

}
```

#endregion

```
private placementDataSet2 placementDataSet2;

private System.Windows.Forms.BindingSource companyBindingSource;

private placementDataSet2TableAdapters.companyTableAdapter companyTableAdapter;

private System.Windows.Forms.Button button1;

private System.Windows.Forms.DataGrid dataGridView1;

private placementDataSet3 placementDataSet3;

private System.Windows.Forms.BindingSource companyBindingSource1;

private placementDataSet3TableAdapters.companyTableAdapter companyTableAdapter1;
```

```
private System.Windows.Forms.DataGridViewTextBoxColumn  
idDataGridViewTextBoxColumn;
```

```
private System.Windows.Forms.DataGridViewTextBoxColumn  
nameDataGridViewTextBoxColumn;
```

```
private System.Windows.Forms.DataGridViewTextBoxColumn  
designationDataGridViewTextBoxColumn;
```

```
private System.Windows.Forms.DataGridViewTextBoxColumn  
cTCDataGridViewTextBoxColumn;
```

```
private System.Windows.Forms.DataGridViewTextBoxColumn  
eligibilityDataGridViewTextBoxColumn;
```

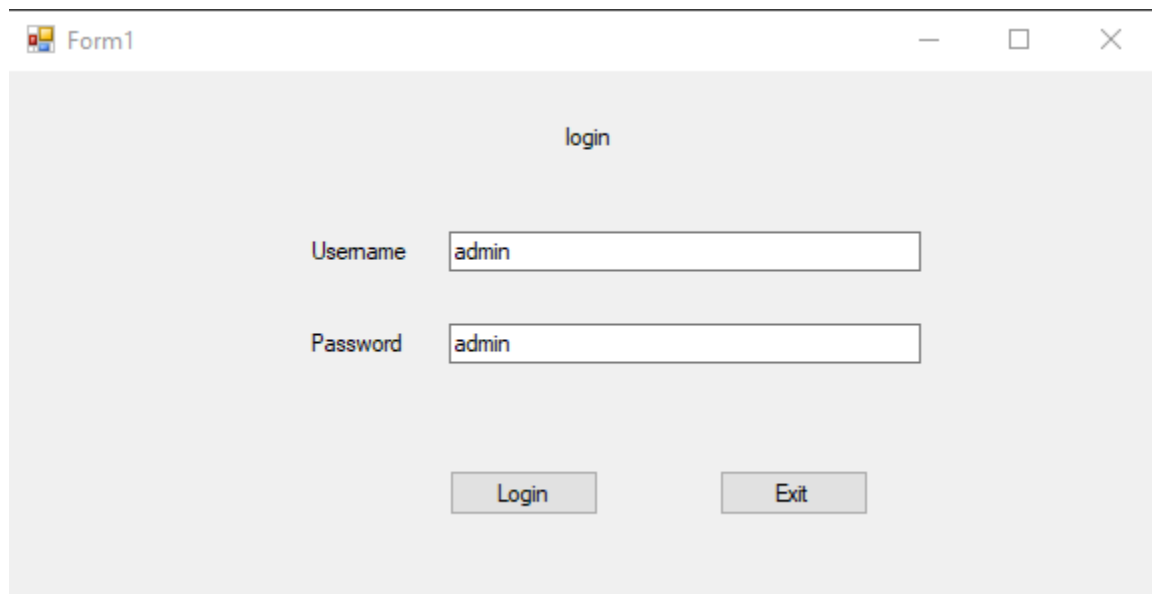
```
private System.Windows.Forms.DataGridViewTextBoxColumn  
typeDataGridViewTextBoxColumn;
```

```
private System.Windows.Forms.DataGridViewTextBoxColumn  
dateofDriveDataGridViewTextBoxColumn;
```

```
}
```

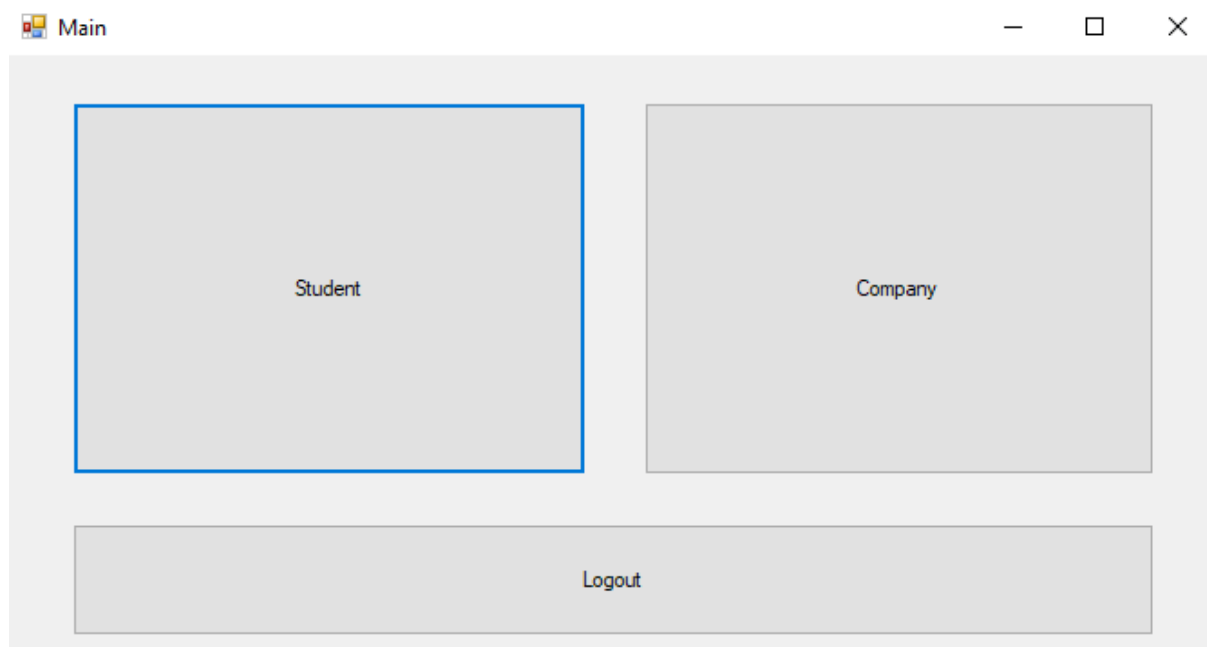
```
}
```

Output



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 is light gray and contains the following elements:

- The word "login" centered at the top.
- A label "Username" followed by a text input field containing the text "admin".
- A label "Password" followed by a text input field containing the text "admin".
- Two buttons at the bottom: "Login" and "Exit".



The screenshot shows a Windows application window titled "Main". The window has a standard Windows title bar with minimize, maximize, and close buttons. The main content area is light gray and contains the following elements:

- Two large rectangular buttons side-by-side: "Student" on the left and "Company" on the right.
- A single wide rectangular button at the bottom labeled "Logout".

Student Page

Reg No

Name

Department

Cgpa

Arear

Insert Update Delete

Search Exit

regno	name	dept	cgpa	arear
UR14CS081	R	CSE	8.12	5
ur14cs304	Abhijeet	cse	8.2	0
*				

Acompany

Id

Name

Designation

CTC

Eligibility

Type

Date

Insert Delete Update

Search Exit

Id	Name	Designation	CTC	Eligibility	Type	Date_of_Drive
1	hij	kjh	jkh	jkh	jkh	kjh
2	hjdghjk	kjhghjk	kjhghjk	kjhghjk	kjhghj	kjhfdghjk
0						
*						

Result

The C# program to manage Placement Details System using Windows form Application.was compiled and executed successfully.

Ex. No. 8	Threading and Synchronization		
Date of Exercise	22.09.2017	Date of Upload	24.10.2017

Aim

Write a program in C# for demonstrating the application of threading by following closely the instructions given below.

1. Write concurrent programs to filter multiple of 2, 5 and 10 from a given input.
2. Display the results once the thread finishes execution
3. Find the sum of multiples of 2, 5 and 10 concurrently

Youtube Link

<https://www.youtube.com/watch?v=nwkjyeBLl9s>

Description

A **thread** is defined as the execution path of a program. Each thread defines a unique flow of control. If your application involves complicated and time consuming operations, then it is often helpful to set different execution paths or threads, with each thread performing a particular job. Threads are **lightweight processes**. One common example of use of thread is implementation of concurrent programming by modern operating systems. Use of threads saves wastage of CPU cycle and increase efficiency of an application. In C#, the **System.Threading.Thread** class is used for working with threads. It allows creating and accessing individual threads in a multithreaded application. The first thread to be executed in a process is called the **mainthread**. When a C# program starts execution, the main thread is automatically created. The threads created using the **Thread** class are called the child threads of the main thread. You can access a thread using the **CurrentThread** property of the Thread class.

Program

```
using System;
```

```
using System.Collections.Generic;
```

```
using System.Linq;
```



```
using System.Text;
```

```
using System.Threading.Tasks;
```

```
using System.Threading;
```

```
namespace ConsoleApplication9
```

```
{
```

```
    public delegate void MyDelegate();
```

```
    public delegate int MyDel(int x);
```

```
    class yo
```

```
    {
```

```
        public static int size;
```

```
        public static int[] arr = new int[50];
```

```
        public static int sum = 0;
```

```
        public static int flag = 0;
```

```
        public void calculate()
```

```
        {
```

```
            lock (this)
```

```
            {
```

```
                if (flag == 0)
```

```
                {
```

```
        Console.WriteLine("calculate");

        for (int i = 0; i < size; i++)

        {

            if (arr[i] % 2 == 0 && arr[i] % 5 == 0 && arr[i] % 10 == 0)

            {

                Console.WriteLine(arr[i]);

                sum = sum + arr[i];

            }

        }

        else

        {

            Console.WriteLine("sum of input which follows the condition:"+sum);

        }

        flag++;

    }

    class Program :yo

    {

        public void foo()

        {

            Console.WriteLine("enter how many you want to enter");

            size = int.Parse(Console.ReadLine());

            Thread delt = new Thread(inputrun);

            delt.Start();
```

```
}

public int message(IAsyncResult result)
{
    Console.WriteLine("callbackmethod"+result);

    return 1;
}

static void inputrun()
{
    Console.WriteLine("give input");

    for (int i = 0; i < size; i++)
    {
        arr[i] = int.Parse(Console.ReadLine());
    }
}

public int asum(int x)
{
    Console.WriteLine("***** Async Function");

    x = sum;

    return sum;
}}

static void Main(string[] args)
{
```

```
Program p = new Program();  
MyDelegate del = p.foo;  
Thread[] Threads = new Thread[2];  
del();  
yo y = new yo();  
Thread.Sleep(5000);  
// display input using lambda expression
```

```
new Thread(() =>  
    {  
        Console.WriteLine("numbers you have entered");  
        for (int i = 0; i < size; i++)  
        {  
            Console.WriteLine(arr[i]);  
        }  
    }).Start();  
for (int i = 0; i < 2; i++)  
{  
    Threads[i] = new Thread(new ThreadStart(y.calculate));  
}  
foreach (Thread t in Threads)  
    t.Start();
```

```
//Console.WriteLine(sum);

Thread.Sleep(1000);//to sleep main thread

MyDel del1 = p.asum;

IAsyncResult asyncRes = del1.BeginInvoke(10, null,null);

Console.WriteLine("asyncResult");

int res = del1.EndInvoke(asyncRes);

Console.WriteLine(res);

Console.ReadLine();

}}}
```

Output

```
enter how many you want to enter
3
give input
2
10
30
numbers you have entered
2
10
30
calculate
10
30
sum of input which follows the condition:40
asyncResult
***** Async Function
40
```

Result

The C# program on Threading was compiled and executed successfully.

Ex. No. 9	Web Application using ASP.NET		
Date of Exercise	06.10.2017	Date of Upload	25.10.2017

Aim

To design a web application using ASP.Net for maintaining Student Gradesheet

Concepts to be included:

1. Every application must contain login and registration page
2. Use database to maintain the details
3. Include other necessary pages based on the application
4. Database operation – insert, update, delete, search
5. Display in Gridview

Youtube Link

<https://www.youtube.com/watch?v=L0NNjp1VGN4>

Description

ASP.NET provides a unified Web development model that includes the services necessary for you to build enterprise-class Web applications. ASP.NET is part of the .NET Framework and enables you to take full advantage of the features of the common language runtime (CLR), such as type safety, inheritance, language interoperability, and versioning.

When you use Visual Studio to create ASP.NET Web sites, you are actually using a part of the integrated development environment (IDE) called Visual Web Developer. Visual Web Developer is distinct from Visual C#; it has its own designer to create user interfaces on Web pages and other tools for Web development and Web site administration. But when you create code-behind pages in C# for your Web controls, you are using the C# code editor, and all the features of the editor are available to you in Visual Web Developer just as they are in Visual C#.

Program


```
password<asp:TextBox ID="TextBox2" runat="server" Width="227px"></asp:TextBox>

</p>

<div style="margin-left: 440px">

    <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="login"
Width="61px" />

</div>

<p style="margin-left: 440px">

    &nbsp;</p>

</form>

</body>

</html>
```

Admin.aspx.cs

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;

using System.Web.UI;

using System.Web.UI.WebControls;

using System.Data.SqlClient;

public partial class Admin : System.Web.UI.Page
```

```
{  
    protected void Page_Load(object sender, EventArgs e)  
    {  
  
    }  
    protected void Button1_Click(object sender, EventArgs e)  
    {  
        String cons = "Data Source=IVCSEDB;Initial Catalog=ur14cs304;Integrated  
Security=True";  
        SqlConnection comm = new SqlConnection(cons);  
        comm.Open();  
        String username = TextBox1.Text;  
        String password = TextBox2.Text;  
        SqlCommand com = new SqlCommand("select count(*) from grade where name='" +  
username + "' and pass='" + password + "'", comm);  
        int count = (int)com.ExecuteScalar();  
        if (count == 1)  
        {  
            if (username == "admin")  
            {  
                Response.Redirect("Gradesheet.aspx");  
            }  
            else
```

```
        Response.Redirect("Student.aspx");
    }
    else if (count == 0)
    {
        ScriptManager.RegisterClientScriptBlock(this, this.GetType(), "alert message",
"alert('Invalid Login')", true);
    }

    comm.Close();
}
}
```

Gradesheet.aspx

```
<% @ Page Language="C#" AutoEventWireup="true" CodeFile="Gradesheet.aspx.cs"
Inherits="Gradesheet" %>
```

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
```

```
<head runat="server">
```

```
<title></title>
```

```
</head>
```

```
<body>
```

```
<form id="form1" runat="server">
```

<div>

<p style="margin-left: 280px">

Grade sheet</p>

</div>

<div style="margin-left: 240px">

<asp:Label ID="Label1" runat="server" Text="student school id"></asp:Label>

<asp:TextBox ID="TextBox1" runat="server" Width="204px"></asp:TextBox>

student name<asp:TextBox ID="TextBox4" runat="server"
Width="219px"></asp:TextBox>

internal grade<asp:TextBox ID="TextBox2" runat="server"
Width="222px"></asp:TextBox>

external grade<asp:TextBox ID="TextBox3" runat="server"
Width="222px"></asp:TextBox>

password<asp:TextBox ID="TextBox7" runat="server" Width="245px"></asp:TextBox>

</div>

<div style="margin-left: 360px">

```
<asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="submit" />

</div>

<div style="margin-left: 360px">

    <asp:Button ID="Button2" runat="server" OnClick="Button2_Click" Text="update" />

</div>

<div style="margin-left: 360px">

    <asp:Button ID="Button3" runat="server" OnClick="Button3_Click" style="height:
26px" Text="display" />

</div>

<div style="margin-left: 360px">

    <asp:Button ID="Button4" runat="server" OnClick="Button4_Click" Text="delete" />

    <asp:TextBox ID="TextBox5" runat="server"></asp:TextBox>

    <br />

    <asp:Button ID="Button5" runat="server" OnClick="Button5_Click" Text="search" />

    <asp:TextBox ID="TextBox6" runat="server"></asp:TextBox>

    <br />

    <br />

    <br />

</div>

<asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False"
Width="916px">

    <Columns>

        <asp:BoundField DataField="id" HeaderText="id" SortExpression="id" />
```

```
<asp:BoundField DataField="name" HeaderText="name" SortExpression="name" />

<asp:BoundField DataField="internal" HeaderText="internal"
SortExpression="internal" />

<asp:BoundField DataField="external" HeaderText="external"
SortExpression="external" />

<asp:BoundField DataField="pass" HeaderText="pass" SortExpression="pass" />

</Columns>

</asp:GridView>

<asp:SqlDataSource ID="SqlDataSource1" runat="server" ConnectionString="<%%$
ConnectionStrings:ur14cs304ConnectionString %>" SelectCommand="SELECT * FROM
[grade]"></asp:SqlDataSource>

<asp:SqlDataSource ID="SqlDataSource2" runat="server" ConnectionString="<%%$
ConnectionStrings:ur14cs304ConnectionString %>" SelectCommand="SELECT * FROM
[grade] WHERE id=@Id ">

<SelectParameters>

<asp:ControlParameter Name="Id" ControlID="TextBox6" Type="String" />

</SelectParameters>

</asp:SqlDataSource>

</form>

</body></html>
```

Gradesheet.aspx.cs

```
using System;

using System.Collections.Generic;

using System.Linq;
```

```
using System.Web;

using System.Web.UI;

using System.Web.UI.WebControls;

using System.Data.SqlClient;

using System.Data;

public partial class Gradesheet : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {

    }

    protected void Button5_Click(object sender, EventArgs e)
    {
        GridView1.DataSource = SqlDataSource2;

        GridView1.DataBind();
    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        String cons = "Data Source=IVCSEDB;Initial Catalog=ur14cs304;Integrated
Security=True";

        SqlConnection comm = new SqlConnection(cons);

        comm.Open();
    }
}
```

```
SqlCommand com = new SqlCommand("insert into grade values(@i,@n,@in,@e,@p)",
comm);

com.Parameters.Add("@i", SqlDbType.Int, 0, "id").Value=int.Parse(TextBox1.Text);
com.Parameters.Add("@n", SqlDbType.VarChar, 255, "name").Value = TextBox4.Text;
com.Parameters.Add("@in", SqlDbType.VarChar, 255, "internal").Value = TextBox2.Text;
com.Parameters.Add("@e", SqlDbType.VarChar, 255, "external").Value = TextBox3.Text;
com.Parameters.Add("@p", SqlDbType.VarChar, 255, "pass").Value = TextBox7.Text;
com.ExecuteNonQuery();
comm.Close();

}

protected void Button2_Click(object sender, EventArgs e)
{
    String cons = "Data Source=IVCSEDB;Initial Catalog=ur14cs304;Integrated
Security=True";

    SqlConnection comm = new SqlConnection(cons);

    comm.Open();

    SqlCommand com = new SqlCommand("update grade set internal=@in,[external]=@e
where id='" + TextBox1.Text + "'", comm);

    com.Parameters.Add("@in", SqlDbType.VarChar, 255, "internal").Value = TextBox2.Text;
    com.Parameters.Add("@e", SqlDbType.VarChar, 255, "external").Value = TextBox3.Text;
    com.ExecuteNonQuery();
}
```



```
comm.Close();

}

protected void Button3_Click(object sender, EventArgs e)
{
    GridView1.DataSource = SqlDataSource1;
    GridView1.DataBind();

}

protected void Button4_Click(object sender, EventArgs e)
{
    String cons = "Data Source=IVCSEDB;Initial Catalog=ur14cs304;Integrated
Security=True";

    SqlConnection comm = new SqlConnection(cons);

    comm.Open();

    SqlCommand com = new SqlCommand("delete from grade where id=" + TextBox5.Text +
"", comm);

    com.ExecuteNonQuery();

    comm.Close();

}

}
```

Student.aspx

```
<% @ Page Language="C#" AutoEventWireup="true" CodeFile="Student.aspx.cs"
Inherits="Student" %>
```

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
```

```
<head runat="server">
```

```
<title></title>
```

```
</head>
```

```
<body>
```

```
<form id="form1" runat="server">
```

```
<div>
```

```
<p style="margin-left: 400px">
```

```
Student gradesheet</p>
```

```
</div>
```

```
<p style="margin-left: 360px">
```

```
enter id<asp:TextBox ID="TextBox1" runat="server" Width="207px"></asp:TextBox>
```

```
</p>
```

```
<p style="margin-left: 360px">
```

```
&nbsp;</p>
```

```
<p style="margin-left: 360px">
    <asp:Button ID="Button1" runat="server" Text="show" OnClick="Button1_Click" />
</p>
<asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" >
    <Columns>
        <asp:BoundField DataField="id" HeaderText="id" SortExpression="id" />
        <asp:BoundField DataField="name" HeaderText="name" SortExpression="name" />
        <asp:BoundField DataField="internal" HeaderText="internal"
SortExpression="internal" />
        <asp:BoundField DataField="external" HeaderText="external"
SortExpression="external" />
        <asp:BoundField DataField="pass" HeaderText="pass" SortExpression="pass" />
    </Columns>
</asp:GridView>
<asp:SqlDataSource ID="SqlDataSource1" runat="server" ConnectionString="<%"$
ConnectionString:ur14cs304ConnectionString3 %>" SelectCommand="SELECT * FROM
[grade] WHERE id=@Id">
    <SelectParameters>
        <asp:ControlParameter Name="Id" ControlID="TextBox1" Type="Int32" />
    </SelectParameters>
</asp:SqlDataSource>

</form>
</body>
```

</html>

Student.aspx.cs

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;

using System.Web.UI;

using System.Web.UI.WebControls;

public partial class Student : System.Web.UI.Page

{

    protected void Page_Load(object sender, EventArgs e)

    {

    }

    protected void Button1_Click(object sender, EventArgs e)

    {

        GridView1.DataSource = SqlDataSource1;

        GridView1.DataBind();

    }

}
```

Output

Login

username

password

Grade sheet

student school id

student name

internal grade

external grade

password

id	name	internal	external	pass
1	admin	0	0	admin
2	abhi	34	78	1234

Student gradesheet

enter id

id	name	internal	external	pass
2	abhi	34	78	1234

Result

The C# program to design a web application using ASP.Net for maintaining Student Grade sheet was compiled and executed successfully.

Ex. No. 10	Advanced Web Design		
Date of Exercise	13.10.2017	Date of Upload	30.10.2017

Aim

To design a web application using ASP.Net for maintaining Student Gradesheet

Concepts to be included:

1. Design a Master Page with Tree view in the left side
2. Registration form validation using validation controls
3. User control or Custom control

Youtube Link

<https://www.youtube.com/watch?v=ifCfBcVUp1o>

Description

ASP.NET provides a unified Web development model that includes the services necessary for you to build enterprise-class Web applications. ASP.NET is part of the .NET Framework and enables you to take full advantage of the features of the common language runtime (CLR), such as type safety, inheritance, language interoperability, and versioning.

When you use Visual Studio to create ASP.NET Web sites, you are actually using a part of the integrated development environment (IDE) called Visual Web Developer. Visual Web Developer is distinct from Visual C#; it has its own designer to create user interfaces on Web pages and other tools for Web development and Web site administration. But when you create code-behind pages in C# for your Web controls, you are using the C# code editor, and all the features of the editor are available to you in Visual Web Developer just as they are in Visual C#.

Program

Admin.aspx

[illegible]


```
</p>

<div style="margin-left: 440px">

    <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="login"
Width="61px" />

</div>

<p style="margin-left: 440px">

    &nbsp;  </p>

</form>

</body>

</html>
```

Admin.aspx.cs

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;

using System.Web.UI;

using System.Web.UI.WebControls;

using System.Data.SqlClient;

public partial class Admin : System.Web.UI.Page

{
```

```
protected void Page_Load(object sender, EventArgs e)
{

}

protected void Button1_Click(object sender, EventArgs e)
{
    String cons = "Data Source=IVCSEDB;Initial Catalog=ur14cs304;Integrated
Security=True";

    SqlConnection comm = new SqlConnection(cons);

    comm.Open();

    String username = TextBox1.Text;

    String password = TextBox2.Text;

    SqlCommand com = new SqlCommand("select count(*) from grade where name='" +
username + "' and pass='" + password + "'", comm);

    int count = (int)com.ExecuteScalar();

    if (count == 1)
    {
        if (username == "admin")
        {
            Response.Redirect("Gradesheet.aspx");
        }
        else
            Response.Redirect("Student.aspx");
    }
}
```

```
    }  
    else if (count == 0)  
    {  
        ScriptManager.RegisterClientScriptBlock(this, this.GetType(), "alert message",  
"alert('Invalid Login')", true);  
    }  
  
    comm.Close();  
}  
}
```

Gradesheet.aspx

```
<% @ Page Language="C#" AutoEventWireup="true" CodeFile="Gradesheet.aspx.cs"  
Inherits="Gradesheet" %>
```

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
```

```
<head runat="server">
```

```
    <title></title>
```

```
</head>
```

```
<body>
```

```
    <form id="form1" runat="server">
```

```
    <div>
```

<p style="margin-left: 280px">

Grade sheet</p>

</div>

<div style="margin-left: 240px">

<asp:Label ID="Label1" runat="server" Text="student school id"></asp:Label>

<asp:TextBox ID="TextBox1" runat="server" Width="204px"></asp:TextBox>

student name<asp:TextBox ID="TextBox4" runat="server"
Width="219px"></asp:TextBox>

internal grade<asp:TextBox ID="TextBox2" runat="server"
Width="222px"></asp:TextBox>

external grade<asp:TextBox ID="TextBox3" runat="server"
Width="222px"></asp:TextBox>

password<asp:TextBox ID="TextBox7" runat="server" Width="245px"></asp:TextBox>

</div>

<div style="margin-left: 360px">

<asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="submit" />

```
</div>

<div style="margin-left: 360px">

    <asp:Button ID="Button2" runat="server" OnClick="Button2_Click" Text="update" />

</div>

<div style="margin-left: 360px">

    <asp:Button ID="Button3" runat="server" OnClick="Button3_Click" style="height:
26px" Text="display" />

</div>

<div style="margin-left: 360px">

    <asp:Button ID="Button4" runat="server" OnClick="Button4_Click" Text="delete" />

    <asp:TextBox ID="TextBox5" runat="server"></asp:TextBox>

    <br />

    <asp:Button ID="Button5" runat="server" OnClick="Button5_Click" Text="search" />

    <asp:TextBox ID="TextBox6" runat="server"></asp:TextBox>

    <br />

    <br />

    <br />

</div>

<asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False"
Width="916px">

    <Columns>

        <asp:BoundField DataField="id" HeaderText="id" SortExpression="id" />

        <asp:BoundField DataField="name" HeaderText="name" SortExpression="name" />

    </Columns>

</asp:GridView>
```

```
<asp:BoundField DataField="internal" HeaderText="internal"
SortExpression="internal" />

<asp:BoundField DataField="external" HeaderText="external"
SortExpression="external" />

<asp:BoundField DataField="pass" HeaderText="pass" SortExpression="pass" />

</Columns>

</asp:GridView>

<asp:SqlDataSource ID="SqlDataSource1" runat="server" ConnectionString="<%%$
ConnectionStrings:ur14cs304ConnectionString %>" SelectCommand="SELECT * FROM
[grade]"></asp:SqlDataSource>

<asp:SqlDataSource ID="SqlDataSource2" runat="server" ConnectionString="<%%$
ConnectionStrings:ur14cs304ConnectionString %>" SelectCommand="SELECT * FROM
[grade] WHERE id=@Id ">

<SelectParameters>

<asp:ControlParameter Name="Id" ControlID="TextBox6" Type="String" />

</SelectParameters>

</asp:SqlDataSource>

</form>

</body></html>
```

Gradesheet.aspx.cs

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;
```

```
using System.Web.UI;

using System.Web.UI.WebControls;

using System.Data.SqlClient;

using System.Data;

public partial class Gradesheet : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {

    }

    protected void Button5_Click(object sender, EventArgs e)
    {
        GridView1.DataSource = SqlDataSource2;
        GridView1.DataBind();
    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        String cons = "Data Source=IVCSEDB;Initial Catalog=ur14cs304;Integrated
Security=True";

        SqlConnection comm = new SqlConnection(cons);

        comm.Open();

        SqlCommand com = new SqlCommand("insert into grade values(@i,@n,@in,@e,@p)",
comm);
```

```
com.Parameters.Add("@i", SqlDbType.Int, 0, "id").Value=int.Parse(TextBox1.Text);
com.Parameters.Add("@n", SqlDbType.VarChar, 255, "name").Value = TextBox4.Text;
com.Parameters.Add("@in", SqlDbType.VarChar, 255, "internal").Value = TextBox2.Text;
com.Parameters.Add("@e", SqlDbType.VarChar, 255, "external").Value = TextBox3.Text;
com.Parameters.Add("@p", SqlDbType.VarChar, 255, "pass").Value = TextBox7.Text;
com.ExecuteNonQuery();
comm.Close();

}

protected void Button2_Click(object sender, EventArgs e)
{
    String cons = "Data Source=IVCSEDB;Initial Catalog=ur14cs304;Integrated
Security=True";

    SqlConnection comm = new SqlConnection(cons);

    comm.Open();

    SqlCommand com = new SqlCommand("update grade set internal=@in,[external]=@e
where id='" + TextBox1.Text + "'", comm);

    com.Parameters.Add("@in", SqlDbType.VarChar, 255, "internal").Value = TextBox2.Text;
    com.Parameters.Add("@e", SqlDbType.VarChar, 255, "external").Value = TextBox3.Text;
    com.ExecuteNonQuery();
    comm.Close();
}
```



```
}

protected void Button3_Click(object sender, EventArgs e)
{
    GridView1.DataSource = SqlDataSource1;
    GridView1.DataBind();

}

protected void Button4_Click(object sender, EventArgs e)
{
    String cons = "Data Source=IVCSEDB;Initial Catalog=ur14cs304;Integrated
Security=True";

    SqlConnection comm = new SqlConnection(cons);
    comm.Open();

    SqlCommand com = new SqlCommand("delete from grade where id=" + TextBox5.Text +
"", comm);

    com.ExecuteNonQuery();
    comm.Close();
}
}
```

Student.aspx

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Student.aspx.cs"
Inherits="Student" %>
```

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
```

```
<head runat="server">
```

```
<title></title>
```

```
</head>
```

```
<body>
```

```
<form id="form1" runat="server">
```

```
<div>
```

```
<p style="margin-left: 400px">
```

```
Student gradesheet</p>
```

```
</div>
```

```
<p style="margin-left: 360px">
```

```
enter id<asp:TextBox ID="TextBox1" runat="server" Width="207px"></asp:TextBox>
```

```
</p>
```

```
<p style="margin-left: 360px">
```

```
&nbsp;</p>
```

```
<p style="margin-left: 360px">
```

```
<asp:Button ID="Button1" runat="server" Text="show" OnClick="Button1_Click" />
```

```
</p>
```

```
<asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False" >
    <Columns>
        <asp:BoundField DataField="id" HeaderText="id" SortExpression="id" />
        <asp:BoundField DataField="name" HeaderText="name" SortExpression="name" />
        <asp:BoundField DataField="internal" HeaderText="internal"
SortExpression="internal" />
        <asp:BoundField DataField="external" HeaderText="external"
SortExpression="external" />
        <asp:BoundField DataField="pass" HeaderText="pass" SortExpression="pass" />
    </Columns>
</asp:GridView>

<asp:SqlDataSource ID="SqlDataSource1" runat="server" ConnectionString="<%=
ConnectionStrings:ur14cs304ConnectionString3 %>" SelectCommand="SELECT * FROM
[grade] WHERE id=@Id">
    <SelectParameters>
        <asp:ControlParameter Name="Id" ControlID="TextBox1" Type="Int32" />
    </SelectParameters>
</asp:SqlDataSource>

</form>
</body>
</html>
```

Student.aspx.cs

```
using System;
```

```
using System.Collections.Generic;

using System.Linq;

using System.Web;

using System.Web.UI;

using System.Web.UI.WebControls;


public partial class Student : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {

    }

    protected void Button1_Click(object sender, EventArgs e)
    {
        GridView1.DataSource = SqlDataSource1;
        GridView1.DataBind();
    }
}
```

Masterpage.master.cs

```
using System;

using System.Collections.Generic;

using System.Linq;
```

```
using System.Web;
```

```
using System.Web.UI;
```

```
using System.Web.UI.WebControls;
```

```
public partial class MasterPage : System.Web.UI.MasterPage
```

```
{
```

```
    protected void Page_Load(object sender, EventArgs e)
```

```
    {
```

```
    }
```

```
}
```

WebUserControls.aspx.cs

```
using System;
```

```
using System.Collections.Generic;
```

```
using System.Linq;
```

```
using System.Web;
```

```
using System.Web.UI;
```

```
using System.Web.UI.WebControls;
```

```
public partial class WebUserControl : System.Web.UI.UserControl
```

```
{
```

```
    protected void Page_Load(object sender, EventArgs e)
```

```
{

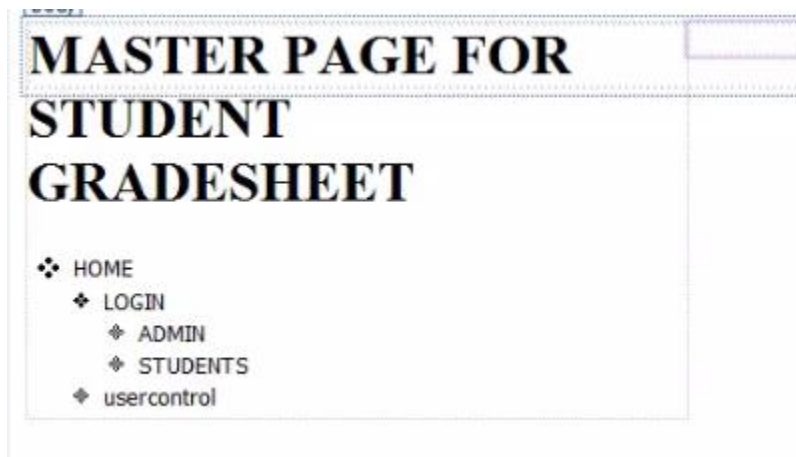
    if (!IsPostBack)
    {
        Calendar1.Visible = false;
    }
}

protected void img_click(object sender, EventArgs e)
{
    if (Calendar1.Visible == true)
    {
        Calendar1.Visible = false;
    }
    else
        Calendar1.Visible = true;

}

protected void selection(object sender, EventArgs e)
{
    TextBox1.Text = Calendar1.SelectedDate.ToShortDateString();
    Calendar1.Visible = false;}}
```

Output



MASTER PAGE FOR STUDENT GRADESHEET

- ❖ HOME
 - ❖ LOGIN
 - ❖ ADMIN
 - ❖ STUDENTS
 - ❖ usercontrol

Login

username

password

Grade sheet

student school id

student name

internal grade

external grade

password

RequiredField

id	name	internal	external	pass
1	admin	0	0	admin
5	abhi	56	67	78
2	abhi	34	78	1234

USER CONTROL

date of birth



A calendar control displaying the month of October 2017. The calendar has a header with navigation arrows and the month/year. The days of the week are listed in the first row, and the dates are arranged in a grid below.

October 2017						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
24	25	26	27	28	29	30
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	1	2	3	4

Result

The C# program to design a web application using ASP.Net with Master Page for maintaining Student Grade sheet was compiled and executed successfully.