

# .NET Assignment

LAB MANUAL

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## Practical-1

### Aim:

#### Introduction to c#:

#### Variables:

- Initialization

- Scope

- Constant

#### Predefined Data Types Value

- Types

- Reference TYpes

#### Flow Control

- Conditional Statements(if, switch)

- Loop(for, while, dowhile, foreach)

- Jump(goto, break, continue, return)

#### Eumerations

#### Passing Arguments

```
using System;
using System.Threading;
namespace P1
{
    class P1
    {
        static int j = 90;
        public enum TimeOfDay
        {
            Morning = 0,
            Afternoon = 1,
            Evening = 2
        }
        public static void Main(string[] args)
        {
            Console.WriteLine("First Program");

            int i;
            i = 25;
            Console.WriteLine("Scope of Variables.\n1:");
            int j;
```

```

        for (int j = 0; j < 2; j++) //removing comment from for loop will
raise error
{
//int j;
    //uncomment above line to error "A local variable named 'j' cannot
be declared in this
    //scope because it would give a different meaning to 'j', which is
already
    //used in a 'parent or current' scope to denote something else"
    Console.WriteLine("{0} {1}\n", j, P1.j);
}
Console.WriteLine("2:");
    for (int k = 0; k < 3; k++)
{
    Console.WriteLine("{0} ", k);
}
Console.WriteLine("\n");
    Console.WriteLine(k);

    for (int k = 3; k > 0; k--)
{
    Console.WriteLine("{0} ", k);
}

Console.WriteLine("Constants");
    const int valConst = 100; // This value cannot be changed.
    Console.WriteLine("{0} is constant value", valConst);
    valConst = 45;
const int valConst2 = valConst + 9 /* + j*/;

    Console.WriteLine("Another Constant: {0}", valConst2);

    Console.WriteLine("\nPredefined Data Types\n\nValue Types and Reference
Types");

//Value Types
int vali = 2, valj = vali;
    Console.WriteLine("vali is: {0} and valj is: {1}", vali,
valj); valj = 90;
    Console.WriteLine("vali is: {0} and valj is: {1}", vali, valj);

//Referece Types
    Vector x, y; x =
    new Vector();
x.value = 3;
y = x;
    Console.WriteLine("x is: {0} and y is:{1}", x.value, y.value);
y.value = 234;
    Console.WriteLine("x is: {0} and y is:{1}", x.value, y.value);

    y = null;
    Console.WriteLine("Value for y is: " + y.value);

```

```

        Console.WriteLine("\nInteger Types");
        sbyte sb = 33;
        short s = 33;
        int _i = 33;
        long l = 33L;

        //Unsigned Integers
        byte b = 33;
        ushort us = 33;
        uint ui = 33U;
        ulong ul = 33UL;
        Console.WriteLine("{0} {1} {2} {3} {4} {5} {6} {7}", sb, s, _i, l,
            b, us, ui, ul);

        //Floating point types    float f
= 11.22334455F;
        double d = 11.2233445566778899;
        Console.Write("\nFloat and Double:\n");
        Console.WriteLine("{0} and \n{1}", f, d);

        //Decimal Type
        decimal dec = 111.222333444555666777888999M;
        Console.WriteLine("Decimal:\n{0}", dec);

        //Boolean
        Console.WriteLine("\nBoolean:");
        bool valBoolean = true;
        Console.WriteLine("Status: " + valBoolean);

        //Character
        Console.WriteLine("\nCharacter:\nSingle Quote \'');
        Console.WriteLine("Double Quote '\"");
        Console.WriteLine("Back Slash \\");
        char charA = 'A';
        Console.WriteLine(charA);
        charA = '\0';
        Console.WriteLine("Now null: " + charA);
        Console.WriteLine("\a"); //Notification Sound Thread.Sleep(1000);
        Console.Beep(); //another notification sound

        object o1 = "Hi, I am an Object";
        object o2 = 34;
        string strObj = o1 as string;
        Console.WriteLine(strObj);
        Console.WriteLine(o1.GetHashCode() + " " + o1.GetType());
        Console.WriteLine(o2.GetHashCode() + " " + o2.GetType());

```

```
Console.WriteLine(o1.Equals(o2));
```

```
//string string  
s1, s2; s1 =  
"String 1"; s2 =  
s1;
```

```

        Console.WriteLine("S1 is: {0} and s2 is {1}", s1,
s2); s2 = "New String 1";
        Console.WriteLine("S1 is: {0} and s2 is {1}", s1, s2);
        s1 = "c:\\NewFolder\\Hello\\P1.cs";
        Console.WriteLine(s1); s1 =
        @"c:\NewFolder\Hello\P1.cs";
        Console.WriteLine(s1);
        s1 = @"We can also write
        like this";
        Console.WriteLine(s1);

//Flow Control
//The if Statement
bool isZero;
        Console.WriteLine("\nFlow Control: (if)\ni is " + i); if
        (i == 0)
        {
                isZero = true;
        Console.WriteLine("i is Zero");
        }
        else
        {
                isZero = false;
        Console.WriteLine("i is Non - zero");
        }

//else if
        Console.WriteLine("\nType in a string:");
        string input;
        input = Console.ReadLine();
        if (input == "")
        {
        Console.WriteLine("You typed in an empty string");
        } else if (input.Length <
        5)
        {
                Console.WriteLine("The string had less than 5 characters");
        } else if (input.Length <
        10)
        {
                Console.WriteLine("The string had at least 5 but less than 10
characters");
        }
        Console.WriteLine("The string was " + input);

//Switch
int integerA = 2;
        Console.WriteLine("\nSwitch:");

        switch (integerA)
        { case 1:
                Console.WriteLine("integerA = 1");
                break; case 2:

```



```

        Console.WriteLine("integerA = 2");
            //goto case 3;
        break;
        case 3:
        Console.WriteLine("integerA = 3");
            break;
default:
            Console.WriteLine("integerA is not 1, 2, or 3");
        break;
    }

    //Loops - to be explored
    //jump statements goto, break, continue, return - to be explored

    //Enumerations
    //An enumeration is a user-defined integer type.
    //Benefits:
        //1.As mentioned, enumerations make your code easier to maintain
        //2.Enumerations make your code clearer by allowing you to refer to integer values
by descriptive names
        //3.Enumerations make your code easier to type, too. When you go to
        assign a value to an instance of an enumerated type,
        //the Visual Studio .NET IDE will, through IntelliSense, pop up a list
        box of acceptable values in order to save
        //you some keystrokes and to remind you of what the possible options
        are.

        WriteGreeting(TimeOfDay.Morning);
        Console.WriteLine("Argument is: {0}",args[1]); }

static void WriteGreeting(TimeOfDay timeOfDay)
{
    switch (timeOfDay)
    {
        case TimeOfDay.Morning:
        Console.WriteLine("Good morning!");
            break;
        case TimeOfDay.Afternoon:
        Console.WriteLine("Good afternoon!");
            break;
        case TimeOfDay.Evening:
            Console.WriteLine("Good evening!");
        break;
        default:
        Console.WriteLine("Hello!");
        break;
    }
}

public class Vector

```

```

    {
        public int value;
    }
}

```

## Output:

```

E: \Sem-6\VS>p1.exe
First Program Scope
of Variables.
1:
0 90
1 90 2:
0 1 2
3 2 1 Constants
100 is constant value
Another Constant: 109

```

## Predefined Data Types

Value Types and Reference Types

```

vali is: 2 and valj is: 2 vali
is: 2 and valj is: 90 x is: 3
and y is:3
x is: 234 and y is:234

```

## Integer Types

```

33 33 33 33 33 33 33 33

```

## Float and Double:

```

11.22334 and
11.2233445566779 Decimal:

```

```

111.222333444555666777888999

```

## Boolean:

```

Status: True

```

## Character:

```

Single Quote '
Double Quote "
Back Slash \
A
Now null:

```

## Hi, I am an Object

```

- 1735802816 System.String
34 System.Int32
False
S1 is: String 1 and s2 is String 1
S1 is: String 1 and s2 is New String 1

```

```
c: \NewFolder\Hello\P1.cs
c: \NewFolder\Hello\P1.cs
We can also write
    like this
```

```
Flow Control: (if)
i is 25
i is Non - zero
```

```
Type in a string:
aAaa
The string had at least 5 but less than 10
characters The string was aAaa
```

```
Switch:
integerA = 2
Good morning!
```

## Practical-2 Aim:

### GTU Programs

Program 1. Write console based program in code behind language VB or C# to print following pattern.

```
@ @ @ @ @
@ @ @ @
@ @ @
@ @ @
```

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

namespace p2
{
    class Pattern1
    {
        static void Main(string[] args)
        {
            for (int i = 5; i > 0; i--) {
                for (int j = i; j > 0; j--) {
                    Console.Write('@');
                }
                Console.WriteLine();
            }
            Console.ReadKey();
        }
    }
}
```

### Output:

```
E: \Sem-6\VS\p2\p2>Pattern1.exe
@@@@@
@@@@@
@@@@
@@@
@@
@
```

Program 2. Write console based program in code behind language VB or C# to print following pattern.

```
1
12
123 1234
```

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

namespace p2
{
    class Pattern2
    { static void Main(String[] ar){
for(int i=1;i<5;i++){
    for(int j=1;j<=i;j++){
        Console.Write(j);
    }
    Console.WriteLine();
    }
    Console.ReadKey();
    }
}
```

### Output:

```
E: \Sem-6\VS\p2\p2>Pattern2.exe
1
12
123
1234
```

Program 3. Write C# code to prompt a user to input his/her name and country name and then the output will be shown as an example below: Hello Ram from country India

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

namespace p2
{
    class Read
    {
        static void Main(String[] ar) { Console.WriteLine("Enter your
            name:"); string name = Console.ReadLine();
            Console.WriteLine("Enter your City:"); string city =
            Console.ReadLine(); Console.WriteLine("Hello {0} from
            city {1}",name,city);

        }
    }
}
```

### Output:

```
E:\Sem-6\VS\p2\p2>Read.exe Enter
your name:
Ram
Enter your City:
rajkot
Hello Ram from city Rajkot
```

Program 4. What is inheritance? Create C# console application to define Car class and derive Maruti and Mahindra from it to demonstrate inheritance.

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

namespace p2
{
    public class Car
    {
        public virtual void display()
        {
            Console.WriteLine("This is Car class...");
        }
    }
    public class Mahindra : Car
    {
        public override void display()
        {
            Console.WriteLine("This is Mahindra class...");
        }
    }
    public class Maruti : Car
    {
        public override void display()
        {
            Console.WriteLine("This is maruti class");
        }
    }
    class Inheritance
    {
        static void Main(String[] ar){
Maruti m = new Maruti();
        Mahindra mm = new Mahindra();
        m.display();
        mm.display();
        }
    }
}
```

### Output:

```
E:\Sem-6\VS\p2\p2>Inheritance.exe
This is maruti class      This
is Mahindra class...
```

## Practical-3

### Aim:

### Overloading

Program 1: Write a c# program to add two integers, two vectors and two metric using method overloading.

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

namespace p2
{
    public class P3_1
    {
        public int add(int a, int b) {
            return a + b;
        }
        public static Vector add(Vector v1, Vector v2)
        { Vector v= new Vector();
            v.a = v1.a + v2.a;
            v.b = v1.b + v2.b;
            return v;
        }
        public static int[,] add(int[,] a, int[,] b) {
            int[,] s = new int[2, 2];
            for (int i = 0; i < 2; i++) {
                for (int j = 0; j < 2; j++) {
                    s[i, j] = a[i, j] + b[i, j];
                }
            }
            return s;
        }
        public static void Main(String[]
ar) {
            int n,n1, n2;
            Vector v = new Vector();

            Console.WriteLine("Enter Number 1:"); n1 =
            Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("Enter Number 2:");
            n2 = Convert.ToInt32(Console.ReadLine());
            n = n1 + n2;
            Console.WriteLine("Addition of Number:{0}", n);

            Console.WriteLine("Enter Vector 1:"); n1 =
            Convert.ToInt32(Console.ReadLine()); n2 =
            Convert.ToInt32(Console.ReadLine());
            Vector v1 = new Vector(n1,n2);
```



```

        Console.WriteLine("Enter Vector 2:");
        n1 =Convert.ToInt32(Console.ReadLine()); n2
        = Convert.ToInt32(Console.ReadLine());
        Vector v2 = new Vector(n1,n2);
v = add(v1, v2);

        Console.WriteLine("Addition of vector: x={0}, y={1}",v.a,v.b);

        int[,] a = new int[,] { { 1, 2 }, { 3, 4 } }; int[,]
        b = new int[,] { { 5, 6 }, { 7, 8 } };

        int[,] c = add(a, b);
        Console.WriteLine("Addition of two matrices:");        for
(int z = 0; z < 2; z++) {
            for (int m = 0; m < 2; m++) {
                Console.WriteLine("Addition: "+ c[z, m]);
            }
        }
        Console.ReadKey();
    }
} public class Vector
{ public int a, b;
    public Vector() { }
    public Vector(int a, int b)
    {
        this.a = a;
        this.b = b;
    }
}
}

```

### Output:

E:\Sem-6\VS\p2\p2>P3.1.exe Enter

Number 1:

1

Enter Number 2:

2

Addition of Number:3

Enter Vector 1:

1

2

Enter Vector 2:

3

1

Addition of vector: x=4, y=3

Addition of two metrics:

Addition: 6

Addition: 8

Addition: 10

Addition: 12

Program 2: Write a c# program that create student object. Overload constructor to create new instant with following details. 1. Name

2. Name , Enrollment

3. Name , Enrollment, Branch

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

namespace p2
{
    public class Student
    { string name, enrollment, branch;
public Student(string name) {
    this.name = name;
        Console.WriteLine("First Constructor initiated..");
    }
    public Student(string name, string enrollment) {
    this.name = name;
        this.enrollment = enrollment; Console.WriteLine("Second Constructor
        initiated..");
    }
    public Student(string name, string enrollment, string branch)
    { this.name = name;
this.enrollment = enrollment;
        this.branch = branch;
        Console.WriteLine("Third Constructor initiated..");
    } public static void Main(String[]
ar) {
        Student s1 = new Student("abdws");
        Student s2 = new Student("Bhavin","125963952");
        Student s3 = new Student("Bhavin","125963952","Computer"); }
    }
}
```

### Output:

```
E: \Sem-6\VS\p2\p2>P3.2.exe
First Constructor initiated..
Second      Constructor
initiated.. Third Constructor
initiated..
```

## Practical-4 Aim:

### Reflection

Create a c# program to find Methods, Properties and Constructors from class of running program.(Use Class from previous practical)

```
using System;
using System.Collections.Generic;
    using System.Linq; using
System.Text;
using System.Reflection;

namespace p2
{
    class Reflection
    {
        static void Main()
        {
            Type T = Type.GetType("p2.Customer");
            MethodInfo[] methods = T.GetMethods();
            foreach (MethodInfo method in methods)
            {
                Console.WriteLine(method.ReturnType + " " + method.Name);
            }

            PropertyInfo[] properties = T.GetProperties();

            Console.WriteLine("\nProperties"); foreach
            (PropertyInfo property in properties)
            {
                Console.WriteLine(property.PropertyType + " " + property.Name); }

            Console.WriteLine("\nConstructors");
            ConstructorInfo[] constructors =
            T.GetConstructors(); foreach (ConstructorInfo
            constructor in constructors) {
                Console.WriteLine(constructor.ToString()); }
        }
    }
    class Customer
    { public int ID { get; set; }
      public string Name { get; set; }
      public Customer(int ID, string Name)
      { this.ID = ID;
        this.Name = Name;
      }
    }
```

```
public Customer()  
{  
    this.ID = -1;  
    this.Name = string.Empty;  
}  
public void printID()  
{  
    Console.WriteLine("ID is: {0}", this.ID);  
}  
public void printName()  
{  
    Console.WriteLine("Name is: {0}", this.Name); }  
}  
  
}
```

### Output:

E: \Sem-6\VS\p2\p2>Reflection.exe

System.Int32 get\_ID  
System.Void set\_ID  
System.String get\_Name  
System.Void set\_Name  
System.Void printID  
System.Void printName  
System.String ToString  
System.Boolean Equals  
System.Int32 GetHashCode  
System.Type GetType

#### Properties

System.Int32 ID  
System.String Name

#### Constructors

Void .ctor(Int32, System.String)  
Void .ctor()

## Practical-5

### Aim:

### File Handling

Program 1: Write a C# program to copy data from one file to another using StreamReader and StreamWriter class.

```
using System ;
using System.Collections.Generic;
using System.Linq; using
System.Text;
using System.IO;

namespace p2
{
    class P4_1
    { public static void Main(){
string f1 = @"f1.txt";    string
f2 = @"f2.txt";
        using (StreamReader reader = new StreamReader(f1))
using (StreamWriter writer = new StreamWriter(f2))
            writer.Write(reader.ReadToEnd());
        }
    }
}
```

### Output:

F1.txt: Hello World...  
F2.txt: Hello World...

Program 2: Write a C# Program to Read Lines from a File until the End of File is Reached.

```
using System;
using System.Collections.Generic;
    using System.Linq; using
System.Text;
using System.IO;

namespace p2
{
    public class CopyFile
    { public void copyFile(string f1, string f2)
        { using (StreamReader reader = new
StreamReader(f1)) using (StreamWriter writer = new
StreamWriter(f2))
            {
                string line = null;
                while ((line = reader.ReadLine()) != null)
                writer.WriteLine(line);
            }
        }
    }
    public class mmain{
        public static void Main(){
            CopyFile cp = new CopyFile();    string
f1 = @"E:\Sem-6\VS\p2\p2\f1.txt"; string f2 =
@"E:\Sem-6\VS\p2\p2\f2.txt"; cp.copyFile(f1,f2);

        }
    }
}
```

### Output:

F1.txt:  
Hello World.....  
hii

how are  
you  
???

F2.txt: Hello  
World.....  
hii

how are  
you  
???

**Program 3: Write a C# Program to List Files in a Directory.**

```
using System;
using System.Collections.Generic;
using System.Linq; using
System.Text;
using System.IO;

namespace p2
{
    class ListFile
    {
        public static void Main() {
            string[] Directories = Directory.GetDirectories(@"E:\Sem-6\VS");
            foreach (string dir in Directories)
                Console.WriteLine(dir);
            string[] files = Directory.GetFiles(@"E:\Sem-6\VS");
            foreach (string file in files)
                Console.WriteLine(file);

            Console.ReadKey();
        }
    }
}
```

**Output:**

E:\Sem-6\VS\p2\p2>P4.3.exe

E:\Sem-6\VS\P1-master  
E:\Sem-6\VS\p2  
E:\Sem-6\VS\Assignment.docx  
E:\Sem-6\VS\C# word.txt  
E:\Sem-6\VS\Doc1.docx  
E:\Sem-6\VS\P1-master.zip  
E:\Sem-6\VS\p1.cs  
E:\Sem-6\VS\p1.exe  
E:\Sem-6\VS\VS.docx E:\Sem-  
6\VS\~\$VS.docx

## Practical-6

### Aim:

### Windows Form Application

Program: Create Windows Form Application for Student Registration and store student Details in Database.

### Form.cs:

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

namespace StudentForm
{
    public partial class Form1 : Form
    {
        string imgPath;
        public Form1()
        {
            InitializeComponent();

            private void btnsave_Click(object sender, EventArgs e)
            {
                string gen = null;
                string subject = null;
                if (genMale.Checked == true) {
                    gen = "m";
                }
                if (genFemale.Checked == true) { gen
                    = "f";
                }
                if (ck1.Checked == true) {
                    subject = subject + " s1";
                }
                if (ck2.Checked == true) {
                    subject = subject + " s2"; }
            }
        }
    }
}
```



```

        string source = @"Data Source=Bhavin\SQLExpress;Initial
        Catalog=DemoDb;Integrated Security=True;Pooling=False";

        string insert = "insert into tblstudent
        (fname,lname,gender,subject,imgStudent) values ('" + txtfname.Text + "','"
+ txtlname.Text + "','" + gen + "','" + subject + "','" + (imgPath
        == null ? "" : imgPath) + "')";
        //MessageBox.Show(insert);
        //string insert = "insert into tblstudent(fname) values
        ('jhghj')"; SqlConnection conn = new SqlConnection(source);

        SqlCommand cmd = new
        SqlCommand(insert,conn); conn.Open(); int
        i = cmd.ExecuteNonQuery();
        conn.Close();
        Console.WriteLine("Success....");

    }

    private void Form1_Load(object sender, EventArgs e)
    {

    }

    private void btnimg_Click(object sender, EventArgs e)
    {
        openFileDialog1.Filter = "Jpg|*.jpg"; if
        (openFileDialog1.ShowDialog() == DialogResult.OK)
        {
            imgPath = openFileDialog1.SafeFileName;
            pictureBox.Image = Image.FromFile(openFileDialog1.FileName);
            //MessageBox.Show(imgPath);
        }
    }

}

```

### Program.cs:

```

using System;
using System.Collections.Generic; using
System.Linq;
using System.Windows.Forms;

```

```
namespace StudentForm
{
    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());
        }
    }
}
```


**Output:**

First Name

Last Name

Gender ☐ Male ☒ Female

subject ☒ s1 ☐ s2





```
<asp:TextBox ID="txtemail" runat="server"></asp:TextBox>  
<asp:RegularExpressionValidator ID="RegularExpressionValidator1"  
runat="server"  
ErrorMessage="RegularExpressionValidator"  
ValidationExpression="\w+([-.\']\w+)*@\w+([-.]\w+)*\.\w+([-.  
.]\w+)*"  
ControlToValidate="txtemail"></asp:RegularExpressionValidator>  
<br />  
</td>  
</tr>  
<tr>  
<td>  
<asp:Label ID="Label3" runat="server"  
Text="Password"></asp:Label>  
  
<asp:TextBox ID="txtpass" runat="server"  
TextMode="Password"></asp:TextBox>  
<br />  
</td>  
</tr>  
<tr>  
<td>  
<asp:Label ID="Label4" runat="server" Text="Confirm  
Password"></asp:Label>  
  
<asp:TextBox ID="txtcpass" runat="server"  
TextMode="Password"></asp:TextBox>  
<asp:CompareValidator ID="CompareValidator1" runat="server"  
ControlToCompare="txtcpass" ControlToValidate="txtpass"  
ErrorMessage="CompareValidator"></asp:CompareValidator>  
<br />  
</td>  
</tr>  
<tr>  
<td>  
<asp:Label ID="Label5" runat="server" Text="Sem"></asp:Label>  
  
<asp:TextBox ID="txtsem" runat="server" Text=""></asp:TextBox>
```

```

        <asp:TextBox ID="txtsem" runat="server"></asp:TextBox>
        <asp:RangeValidator ID="RangeValidator1" runat="server"
        ControlToValidate="txtsem" ErrorMessage="RangeValidator"
        MaximumValue="8"
        MinimumValue="1"></asp:RangeValidator>
        <br />
        <asp:ValidationSummary ID="ValidationSummary1" runat="server"

    /> </td>
</tr>
    <tr>
    <td>
        <asp:Button ID="Button1" runat="server" Text="Save"

    /> </td>
</tr>
</table>
</div>

</form>

```

### Output:

Name	<input type="text"/>	RequiredFieldValidator
Email	<input type="text" value="abcde"/>	RegularExpressionValidator
Password	<input type="password" value="..."/>	
Confirm Password	<input type="password" value="..."/>	CompareValidator
Sem	<input type="text" value="9"/>	RangeValidator

- RequiredFieldValidator
- RegularExpressionValidator
- CompareValidator
- RangeValidator

Save

## Practical-8

### Aim:

### Introduction To Master Pages

### Site1.Master:

```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site1.master.cs"
Inherits="WebApplication1.Site1" %>
```

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd"> <html
xmlns="http://www.w3.org/1999/xhtml"> <head runat="server">
```

```
    <title></title>
    <asp:ContentPlaceHolder ID="head" runat="server">
    </asp:ContentPlaceHolder> <style type="text/css">
        .style1 {
width: 97px;
        height: 141px;
        }
        .style2
        { width: 97px;
height: 105px;
        }
        .style3
        {
        width: 97px;
height: 99px;
        }
        .style4
        { width:
        9px;
        }
    </style>
</head>
<body>
    <form id="form1" runat="server">
    <table height="50%" width="50%">
        <tr>
        <td class="style2" colspan="2">
            <asp:Label ID="lblheader" runat="server"
Text="Header"></asp:Label> </td>
        </tr>
```

```

        <tr>
            <td class="style4">
                <asp:Button ID="btnsearch" runat="server" Text="search" />
                <asp:TextBox ID="txtsearch" runat="server"></asp:TextBox> </td>
            <td class="style3">
                <asp:ContentPlaceHolder ID="ContentPlaceHolder1"
runat="server"> content page
            </asp:ContentPlaceHolder>
        </td>
    </tr>
    <tr>
        <td class="style1" colspan="2">
            <asp:Label ID="lblfooter" runat="server"
Text="Footer"></asp:Label> </td>
        </tr>
    </table>
</form>
</body>
</html>

```

### Site1.Master.cs:

```

using System;
using System.Collections.Generic;
using System.Linq; using
System.Web; using System.Web.UI;
using System.Web.UI.WebControls;

namespace WebApplication1
{
    public partial class Site1 :
System.Web.UI.MasterPage {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        public Label LblHeader {
            get {
                return lblheader;
            }
        }

        public Button
BtnSearch { get {
            return btnsearch;
        }
        }

        public TextBox
TxtSearch { get {
            return txtsearch;
        }
        }
    }
}

```

**WebForm1.aspx:**

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication1.WebForm1" %>

<asp:Content ID="Content1" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
    <asp:TextBox ID="txtname" runat="server" ></asp:TextBox>
    <asp:Button ID="Button1" runat="server" Text="Set Header" onclick="Button1_Click" />
</asp:Content>
```

**WebForm1.aspx.cs:**

```
using System;
using System.Collections.Generic;
    using System.Linq; using
System.Web; using
System.Web.UI;
using System.Web.UI.WebControls;

namespace WebApplication1
{
    public partial class WebForm1 :
System.Web.UI.Page {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            ((Site1)Master).LblHeader.Text = txtname.Text;
        }
    }
}
```

**WebForm2.aspx:**

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="WebApplication1.WebForm2" %>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1"
runat="server"> <asp:GridView ID="grdstudent" runat="server">
```



```
< /asp:GridView>
</asp:Content>
```

### WebForm2.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;
namespace WebApplication1
{
    public partial class WebForm2 :
System.Web.UI.Page {
        protected void Page_Init(object sender, EventArgs e)
        {
            ((Site1)Master).BtnSearch.Click += new EventHandler(BtnSearch_Click);
        }

        void BtnSearch_Click(object sender, EventArgs e)
        { getData();
        }
        protected void Page_Load(object sender, EventArgs e)
        {}
        void getData() {
            string s= ((Site1)Master).TxtSearch.Text;
            Console.WriteLine(s);
            string source = @"Data Source=Bhavin\SQLExpress;Initial
Catalog=DemoDb;Integrated Security=True;Pooling=False";    string select =
"select * from tblstudent where fname like '%" +
            ((Site1)Master).TxtSearch.Text + "%'";
            SqlConnection con = new
            SqlConnection(source); SqlCommand cmd = new
SqlCommand(select, con); con.Open();
            SqlDataReader rdr = cmd.ExecuteReader(); grdstudent.DataSource
            = rdr;
            grdstudent.DataBind();
            con.Close();
        }
    }
}
```

**Output:**

ABC

search	<input type="text"/>	ABC	Set Header
--------	----------------------	-----	------------

Footer

Header

search						
A						

pkstudent	fname	lname	gender	subject	imgStudent	
22	ABC	AAA	f	s1	IMG-20170326-WA0009.jpg	

Footer