.NET LAB MANUAL

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VVP CE SEM-6

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

namespace aim
{
    class Program
    {
              static int newint=100;
              public enum TimeOfDay
              {

              Morning = 0,

              Afternoon = 1,

              Evening = 2

              }

        public static void Main(string[] args)

        {

            Console.WriteLine("\n integer types");

            sbyte sb = 10;

            short s = 33;

            int i = 10;

            long l = 33L;

            byte b = 22;

            ushort us = 33;

            uint ul = 33u;

            ulong ulo = 33ul;
```

```
            Console.WriteLine("{0},{1},{2},{3},{4},{5},{6},{7}", sb, s, i, l, b, us, ul,
ulo);
            float f = 1.122345656767f;
            double d = 12.1234455657878797;
            Console.Write("\nFloat and Double:\n");
            Console.WriteLine("{0} and \n{1}", f, d);
                    decimal dec=111.6666666666666666666M;
                    Console.WriteLine("decimal:\n{0} ",dec);
                    Console.WriteLine("\nBoolean:");
                    bool boolean =true;
                    Console.WriteLine("Status: " + boolean);
          //  Console.ReadLine();
                    char character ='d';
                    Console.WriteLine(character);
                    character = '\0';
                    Console.WriteLine("Now null: " + character);
                    object o1 = "Hi, I am ALICE";
                    object o2 = 15.3454365;
                    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 s1, s2;
                    s1 = "this is string";
                    s2 = s1;
                    Console.WriteLine("S1 is: {0} and s2 is {1}", s1, s2);
                    s2 = "other string";
                    Console.WriteLine("S1 is: {0} and s2 is {1}", s1, s2);
                    s1 = "c:C:\\Users\\Dell\\source\\repos\\aim";
                    Console.WriteLine(s1);
                    s1 = @"c:C:\Users\Dell\source\repos\aim\aim";
                    Console.WriteLine(s1);
```

```
s1 = @"We can also write
like this";
Console.WriteLine(s1);
bool isZero;
Console.WriteLine("\nFlow Control: (if)\ni is " + i);
if (i == 10)
{
isZero = true;
Console.WriteLine("i is Zero {0}",isZero);
}
else
{
isZero = false;
Console.WriteLine("i is Non - zero");
}
int integerA = 1;
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;}
```

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

                     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;



                    }}
                    Console.WriteLine("Scope of Variables.\n1:");
            int newint=0;
                    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 al-
ready
```

```
            //used in a 'parent or current' scope to denote something else"
            Console.Write("{0} {1}\n", newint, Program.newint);
        }
            Console.WriteLine("2:");
        for (int k = 0; k < 3; k++)
        {
            Console.Write("{0} ", k);
        }//Scope of k ends here
        Console.Write("\n");
        //Console.Write(k);
        //uncomment above line to see error "The name 'k' does not exist in the cur-
rent context"
        for (int k = 3; k > 0; k--)
        {
            Console.Write("{0} ", k);
        }//scope of k ends here again

        Console.WriteLine("Constants");
                 const int valConst = 100; // This value cannot be changed.
        Console.WriteLine("{0} is constant value", valConst);
        //valConst = 45;
        //uncomment above line to see error "The left-hand side of an assignment
must be a variable, property or indexer"

        //const only allow constant variables into the expression
        const int valConst2 = valConst + 9 /* + j*/;
        //remove comments from the above line to see error "The expression being as-
signed to 'valConst2' must be constant"
        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);

            //If a variable is a reference, it is possible to indicate that it does not
refer to any object by setting its value to null:

            y = null;

            //Console.Write("Value for y is: " + y.value);

            //uncomment above line to see runtime exception "Sys-
tem.NullReferenceException: Object reference not set to an instance of an object."

            //CTS


                    }


                    public class Vector

                    {

                    public int value;

                    }

        }


}
```

OUTPUT

```
D:\Study\SEM 6\NET>temp

 integer types
10,33,10,33,22,33,33,33

Float and Double:
1.122346 and
12.1234455657879
decimal:
111.666666666666666666

Boolean:
Status: True
d
Now null:
Hi, I am ALICE
846299202 System.String
1302462624 System.Double
False
S1 is: this is string and s2 is this is string
S1 is: this is string and s2 is other string
c:C:\Users\Dell\source\repos\aim
c:C:\Users\Dell\source\repos\aim\aim
We can also write
                            like this

Flow Control: (if)
i is 10
i is Zero True

Switch:
integerA = 1
Good morning!
```

AIM: Inheritance

Program 1

Perform following programs in c#.

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

@ @ @ @ @

@ @ @ @

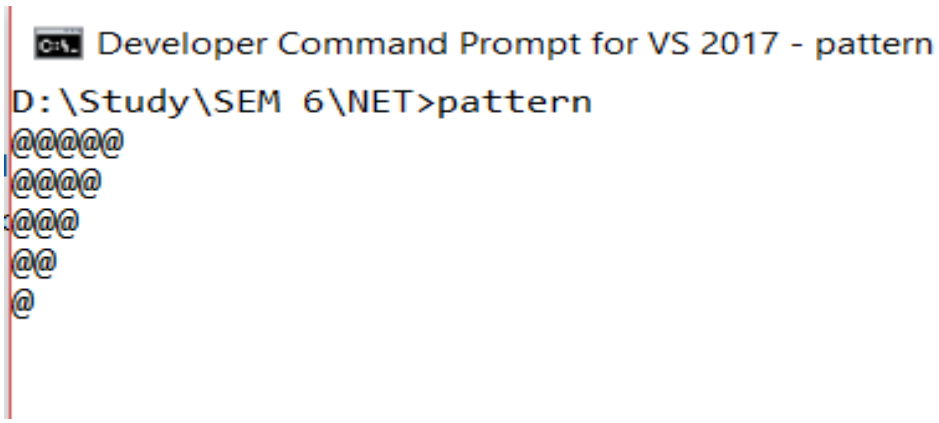
@ @ @

@ @

@

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

namespace pattern1
{
    class Program
    {
        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


Developer Command Prompt for VS 2017 - pattern
D:\Study\SEM 6\NET>pattern
@@@@@
@@@@
@@@
@@
@

Program 2

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

```
1
1 2
1 2 3
1 2 3 4
```

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

namespace pattern2
{
    class Program
    {
        static void Main(string[] args)
        {
            for(int i=1;i<=5;i++)
            {
                for(int j=i;j>0;j--)
                {
                    Console.Write("{0}",i);

                }
                Console.WriteLine("");

            }
            Console.ReadKey();

        }
    }}
```

OUTPUT

```
Developer Command Prompt for VS 2017 - pattern2
D:\Study\SEM 6\NET>pattern2
1
22
333
4444
55555
```

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;
using System.Threading.Tasks;

namespace country
{
    class Program
    {
        static void Main(string[] args)
        {
            string name;
            string country;
            Console.WriteLine("enter your name:");
            name=Console.ReadLine();
            Console.WriteLine("enter your country:");
            country = Console.ReadLine();
            Console.WriteLine("hello {0} from country {1}",name,country);
            Console.ReadKey();
        }

    }
}
```

OUTPUT

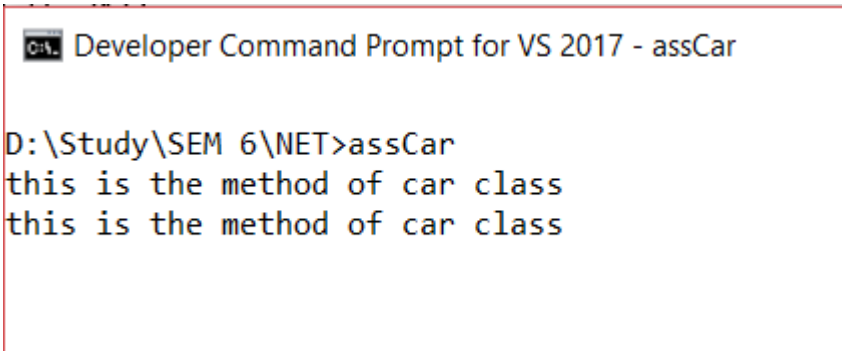
```
Developer Command Prompt for VS 2017 - country
D:\Study\SEM 6\NET>country
enter your name:
Trojan
enter your country:
India
hello Trojan from country India
```

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;
using System.Threading.Tasks;

namespace practical2._3
{
    class car
    {
        public void Method1()
        {
            Console.WriteLine("this is the method of car class");
        }
    }
    class maruti:car
    {
        public void method2()
        {
            Console.WriteLine("this is the method of maruti");
            Console.ReadKey();
        }
    }
    class mahindra:car
    {
        public void method3()
        {
            Console.WriteLine("this is the method of mahindra");
        }
    }
    class Program
    {
        static void Main(string[] args)
        {
            mahindra m = new mahindra();
            maruti m1 = new maruti();
            m.Method1();
            m1.Method1();
            Console.ReadKey();
        }
    }
}
```

OUTPUT


Developer Command Prompt for VS 2017 - assCar
D:\Study\SEM 6\NET>assCar
this is the method of car class
this is the method of car class

AIM: Method & constructor 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 = Con-
      vert.ToInt32(Console.ReadLine());
      Vector v1 = new Vector(n1,n2);
      Console.WriteLine("Enter Vector 2:");
      n1 =Convert.ToInt32(Console.ReadLine()); n2 = Con-
      vert.ToInt32(Console.ReadLine()); Vector v2 = new Vector(n1,n2);
      v = add(v1, v2);

      Console.WriteLine("Addition of vector: <{0}, {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 matrics:");
      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

```
Developer Command Prompt for VS 2017 - vector

D:\Study\SEM 6\NET>vector
Enter Number 1:
5
Enter Number 2:
2
Addition of Number:7
Enter Vector 1:
1
1
Enter Vector 2:
2
2
Addition of vector: <3, 3>
Addition of two matrics:
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;
using System.Threading.Tasks;
using System.Reflection;
namespace p3a1
{
    class Program
    {
        public int ID { get; set; }
        public string Name { get; set; }
        String name, branch;
        int enrol;
        public Program(String name)
        {
            this.name = name;
            Console.WriteLine("constructor 1:" + name);
        }
        public Program(String name, int enrol)
        {
            this.name = name;
            this.enrol = enrol;
            Console.WriteLine("constructor 2:" + name + " " + enrol);

        }
        public Program(String name, int enrol, String branch)
        {
            this.name = name;
            this.enrol = enrol;
            this.branch = branch;
            Console.WriteLine("constructor 3:" + name + " " + enrol + " " + branch);

        }
        static void Main(string[] args)
        {
 Program p1 = new Program("Dhyey");
            Program p2 = new Program("ABC", 60);
            Program p3 = new Program("ABC ", 60, "CE");
             Console.ReadLine();
```

```
        }
    }
}
```

AIM:Reflection

Program:1

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 (ConstructorInfoconstructor 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;
                 }
```

REFLECTION:

```
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()
```

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 Sys-
tem.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 Sys-
tem.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 Sys-
tem.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
```

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 Sys-
tem.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=Deep -Pambhar\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) + "')";

            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:

AIM:ASP.NET VALIDATION CONTROL

Program: ASP.NET Validation Control

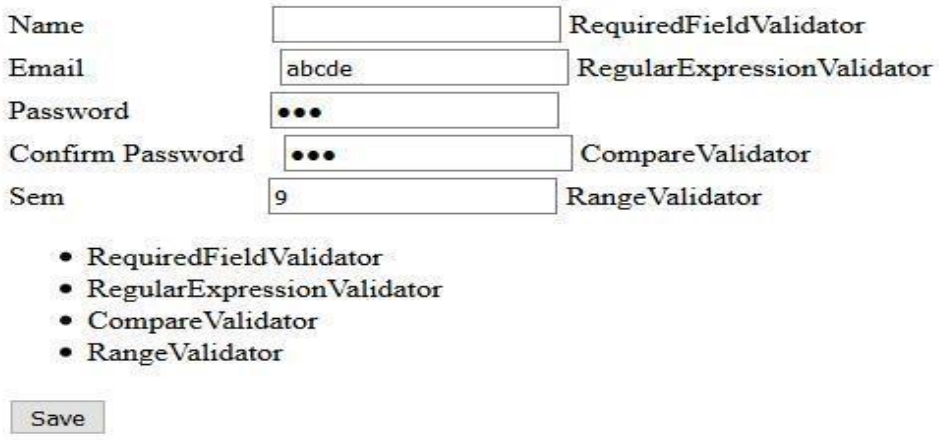
- RequiredFieldValidator
- CompareValidator
- RegularExpressionValidator
- CustomValidator
- RangeValidator
- ValidationSummary

```
<%@ Page Title="Home Page" Language="C#" AutoEventWireup="true"
    CodeBehind="Default.aspx.cs" Inherits="WebApplication2._Default" %>

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

    <div>

        <table>

            <tr>

                <td>

                    <asp:Label runat="server" Text="Name"></asp:Label>


                              

                   ;          &nbs p;


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

                     <asp:RequiredFieldValidator ID="RequiredFieldValidator1"

                     runat="server"

                     ControlToValidate="txtname"

                     ErrorMessage="RequiredFieldValidator"></asp:RequiredFieldValidat
                     or>

                    <br />

                </td>

            </tr>

            <tr>

                <td>

                    <asp:Label ID="Email" runat="server" Text="Email"></asp:Label>

                               

                    ;          &nbs
                    p; 

                    <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 Pass-
               word"></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"></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:



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 run
at="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 :       Sys-
tem.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 Sys-
tem.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 Sys-
tem.Web; usin      g 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=Deep -Pambhar\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 ABC Set Header

Footer

Header

search A

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

Footer

Practical 9

AIM: Web Services

Program 1

Create web service & consume it

WebService1.asmx.cs:

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

using System.Linq;  using System.Web;  using Sys-

tem.Web.Services;

 namespace Service {

[WebService(Namespace = "http://tempuri.org/")] [WebServiceBinding(ConformsTo =
WsiProfiles.BasicProfile1_1)] [System.ComponentModel.ToolboxItem(false)]

 public class WebService1 : System.Web.Services.WebService {



[WebMethod]  public string HelloWorld()

{  return "Hello World";

}  [WebMethod]  public int Add(int a, int b)

{
return a + b;  }  [WebMethod]  public int

Sub(int a, int b)

{  return a - b;  }  [WebMethod]  public int

Mul(int a, int b)
```

```
{ return a * b; } [WebMethod] public int

Div(int a, int b)

{ return a / b;

}

}

}
```

WebForm1.aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebService.WebForm1" %>

<!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>

</head>

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

<div>

<asp:TextBox ID="txtA" runat="server"></asp:TextBox> <asp:RequiredFieldValidator
ID="RequiredFieldValidator1" runat="server" ControlToValidate="txtA"
ErrorMessage="RequiredFieldValidator">

</asp:RequiredFieldValidator>

<asp:RegularExpressionValidator ID="RegularExpressionValidator2" runat="server"
ControlToValidate="txtA" ErrorMessage="RegularExpressionValidator"
ValidationExpression="^[0-9]+">

</asp:RegularExpressionValidator>
```

```
<br />
<asp:TextBox ID="txtB" runat="server"></asp:TextBox> <asp:RequiredFieldValidator
ID="RequiredFieldValidator2" runat="server" ControlToValidate="txtB"
ErrorMessage="RequiredFieldValidator">
</asp:RequiredFieldValidator> <asp:RegularExpressionValidator
ID="RegularExpressionValidator1" runat="server" ControlToValidate="txtB"
ErrorMessage="RegularExpressionValidator" ValidationExpression="^[0-
9]+"></asp:RegularExpressionValidator>
 <br />
<asp:Button ID="btnadd" runat="server" onclick="btnadd_Click" Text="Add" />
 <asp:Button ID="btnsub" runat="server" onclick="btnsub_Click" Text="Sub" />
 <asp:Button ID="btnmul" runat="server" onclick="btnmul_Click" Text="Mul" />
<asp:Button ID="btndiv" runat="server" onclick="btndiv_Click" Text="Div" /> <br />
 <asp:Label ID="lblresult" runat="server" Text="Result">
</asp:Label>

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

WebForm1.aspx.cs:

```
using System;  using System.Collections.Generic;
using System.Linq;  using System.Web;  using Sys-
tem.Web.UI;  using System.Web.UI.WebControls;

 namespace WebService {
```

```
public partial class WebForm1 : System.Web.UI.Page { localhost.WebService1 calc = new lo-
calhost.WebService1();   protected void Page_Load(object sender, EventArgs e) {

}   protected void btnadd_Click(object sender, EventArgs e)

{

lblresult.Text = calc.Add(Convert.ToInt16(txtA.Text), Convert.ToInt16(txtB.Text)).ToString();

}   protected void btnsub_Click(object sender, EventArgs e)

{

lblresult.Text = calc.Sub(Convert.ToInt16(txtA.Text), Convert.ToInt16(txtB.Text)).ToString();

} protected void btnmul_Click(object sender, EventArgs e) {  lblresult.Text =

calc.Mul(Convert.ToInt16(txtA.Text), Convert.ToInt16(txtB.Text)).ToString();

}   protected void btndiv_Click(object sender, EventArgs e) {

lblresult.Text = calc.Div(Convert.ToInt16(txtA.Text), Convert.ToInt16(txtB.Text)).ToString();

}

}

}
```

Output: