LAB MANUAL

.NET TECHNOLOGY

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VVPEC CE SEM -6

Contents

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.Write("{0} {1}\n", j, P1.j);
            }
            Console.WriteLine("2:");
            for (int k = 0; k < 3; k++)
            {
                Console.Write("{0} ", k);
            }
            Console.Write("\n");
            Console.Write(k);

            for (int k = 3; k > 0; k--)
            {
                Console.Write("{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.Write("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 = 111.22233344455566677788899 9M;
            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"); //Notofication 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:

```
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 i       s: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:
viral
The string had at least 5 but less than 10 characters
The string was viral

Switch:
integerA = 2
Good morning!
```


Practical-2 Aim:

Inheritence

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:

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

160470107043

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:

```
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:

```
Enter your name:
viral Enter your
City:   rajkot

Hello viral 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:

```
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 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:

```
Enter Number 1:1
Enter Number 2:2
Addition of Number:3

Enter Vector 1:
1
2
Enter Vector 2:
```

```
3
4
Addition of vector: x=4, y=6

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("Viral");
             Student s2 = new Student("Viral","160470107043");
Student s3 = new Student("Viral","160470107043","Computer"); }
    }
}
```

Output:

```
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:

```
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 vvp...
F2.txt: Hello vvp...
```

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\ p2\f1.txt"; string f2 =
@"E:\Sem-6\ 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 ");
foreach (string file in files)
                Console.WriteLine(file);

            Console.ReadKey();

        }
    }
}
```

Output:

```
E:\Sem-6\ P1-master
E: \Sem-6\ p2
E:\Sem-6\ Assignment.docx
E: \Sem-6\ C# word.txt
E:\Sem-6\ Doc1.docx
E: \Sem-6\ P1-master.zip
E: \Sem-6\ p1.cs
E:\Sem-6\ p1.exe E:
\Sem-6\ 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=Viral-Patel\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
            ('jhgjh')"; 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 S      ystem.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:

Practical-7

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
            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>


                       
            ;          &nbs
            p;  
```

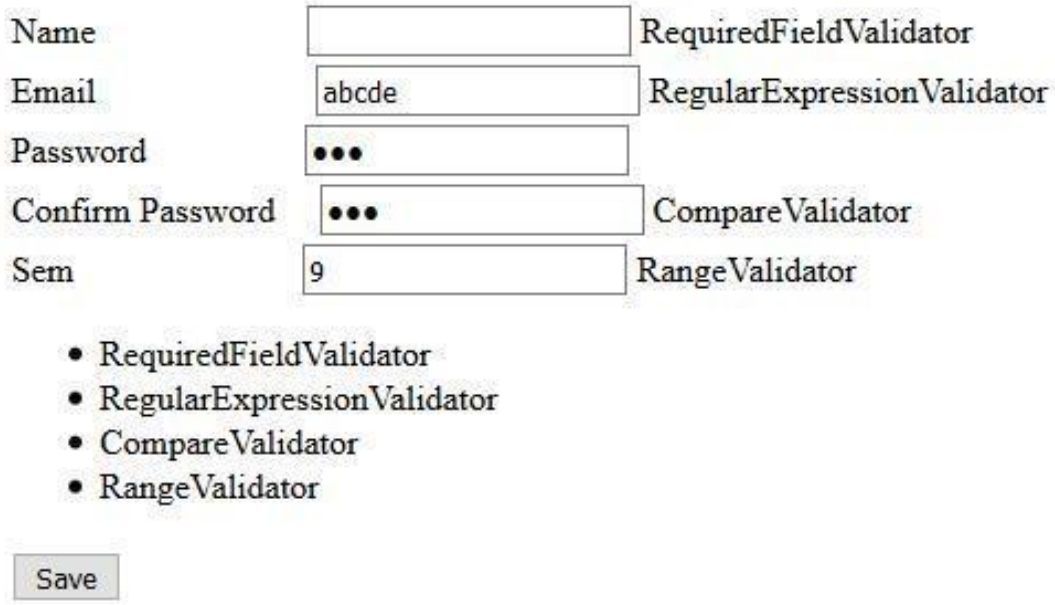
```
                    <asp:TextBox ID="txtsem" runat="server"></asp:TextBox>
                    <asp:RangeValidator ID="RangeValidator1" runat="server"
                    ControlToValidate="txtsem" ErrorMessage="RangeValidator"
                    MaximumValue="8"
                      MinimumValue="1">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



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;
        }

    }
```

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}

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=Viral-Patel\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: