LAB MANUAL

.NET TECHNOLOGY

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Contents

Practical-1 Aim:

Introduction to c#:

Variables:
Initialization
Scope
Constant
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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 = 111.222333444555666777888999M;
            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"); //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:

```
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:
tavan
The string had at least 5 but less than 10 characters
The string was tavan
Switch: integerA = 2
Good morning!
```

Practical-2

Aim:

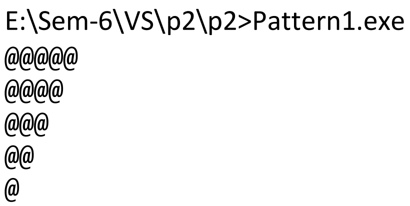
GTU Programs

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
```

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;
```

Program

```
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:
tavan Enter your
City: rajkot
Hello tavan from city Rajkot
```

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
    {
```

Program

```
        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 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:

```
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("Tavan");
            Student s2 = new Student("Tavan","160470107007");
            Student s3 = new Student("Tavan","160470107007","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";
            }
```

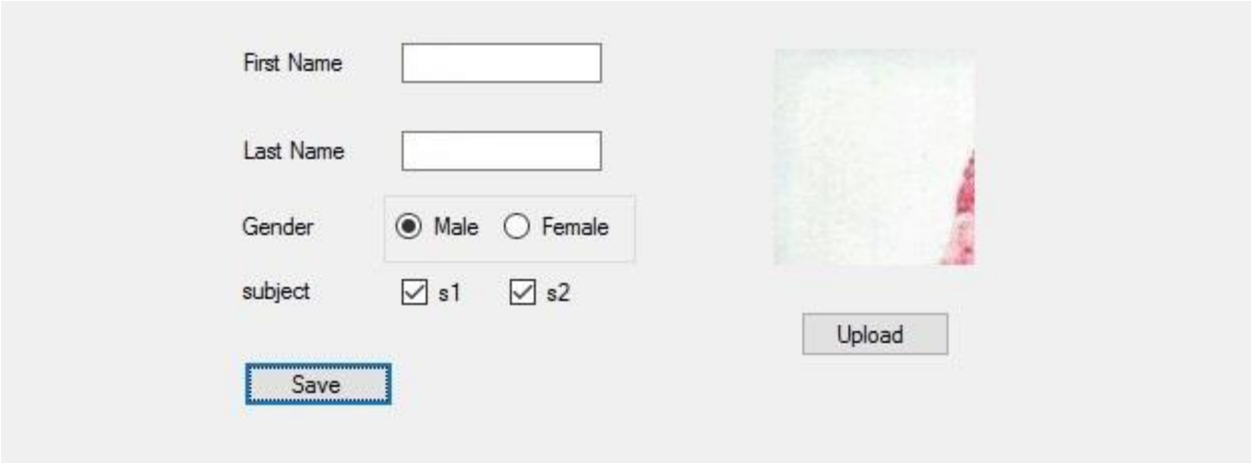
```
             string source = @"Data Source=Tavan-Patel\SQLExpress;Initial
             Catalog=DemoDb;Integrated Security=True;Pooling=False";

            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 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:



Practical-7

Aim:

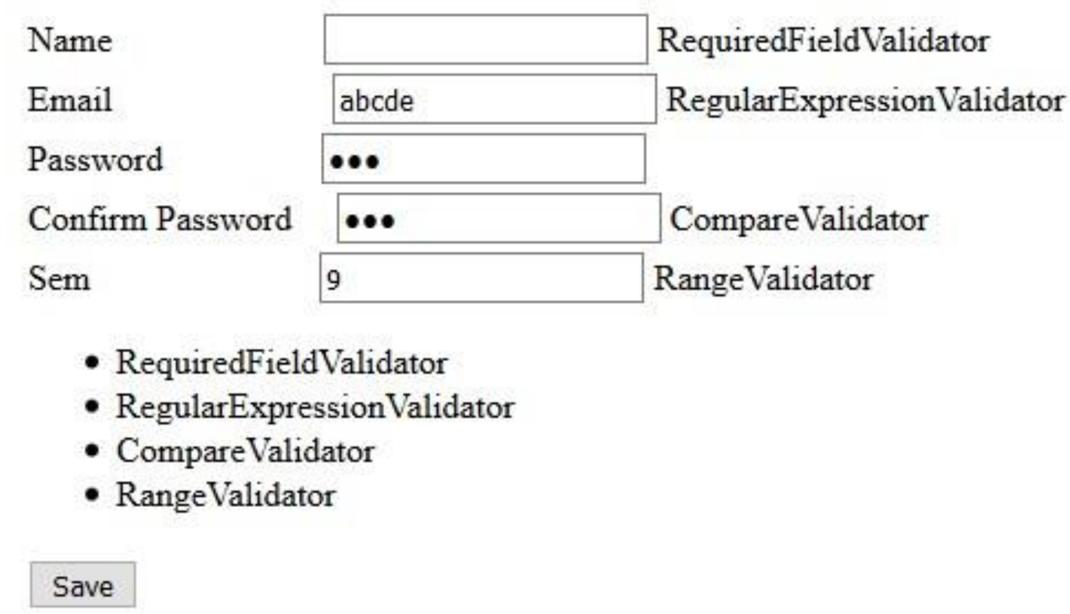
ASP.NET Validation Control

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>


                    &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp
                    ;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&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>

                    &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp
                    ;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbs
                    p;&nbsp;
                    <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>


                    &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp
                    ;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;

                    <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>

                    &nbsp;&nbsp;&nbsp;

                    <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>

                    &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp
                    ;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbs
                    p;&nbsp;&nbsp;

                    <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 RequiredFieldValidator

Email abcde RegularExpressionValidator

Password •••

Confirm Password ••• CompareValidator

Sem 9 RangeValidator

- RequiredFieldValidator
- RegularExpressionValidator
- CompareValidator
- RangeValidator

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;
        }

    }
}
```

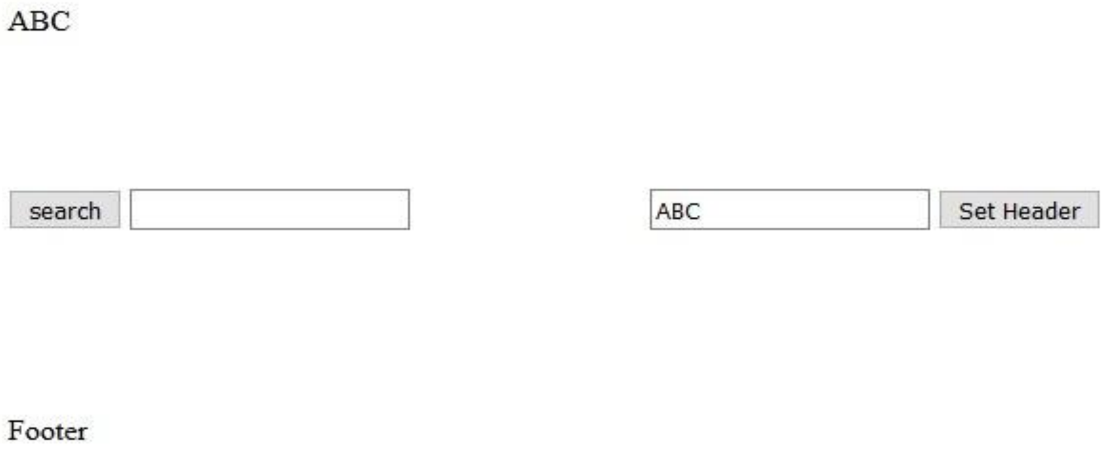
WebForm2.aspx:

```
<%@ 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=Tavan-
            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();
        }
    }
}
```

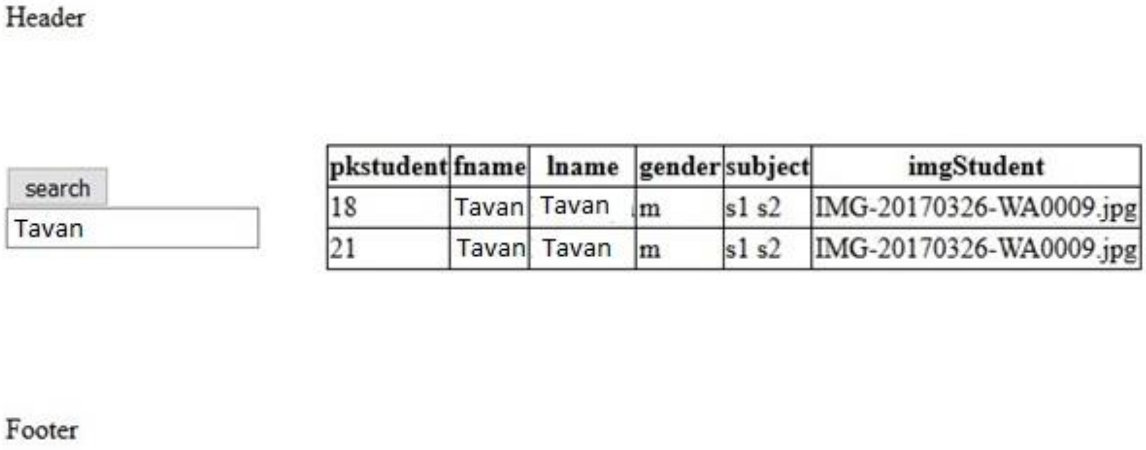
Output:



ABC

ABC

Footer



Header

Tavan

pkstudent	fname	lname	gender	subject	imgStudent
18	Tavan	Tavan	m	s1 s2	IMG-20170326-WA0009.jpg
21	Tavan	Tavan	m	s1 s2	IMG-20170326-WA0009.jpg

Footer