

# .NET TECHNOLOGY

Lab Manual

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## Practical 1

### AIM:

### Introduction to C#

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

namespace Program1
{
    class vector
    {
        public int value;
    }
    class Program1
    {
        static int i = 25;
        public enum TimeOfDay
        {
            Morning = 0,
            Afternoon = 1,
            Evening = 2
        }
        static void Main(string[] args)
        {
            Console.WriteLine("This is first program");
            //Scope of variables
            int i=5;
            Console.WriteLine("Scope of the variable {0}",i);
            for (i = 0; i < 2; i++)
            {
                Console.WriteLine("{0} {1}",i,Program1.i);
            }
            for (int k = 0; k < 2; k++)
            {
                Console.WriteLine("{0}",k);
            }
        }
    }
}
```

```
//Constant
const int valueConst=25;
Console.WriteLine("{0}",valueConst);
//valueConst = 15;
const int valueConst2 = 15;
Console.WriteLine("{0}", valueConst2);
//valueConst = valueConst2;
Console.WriteLine("{0}",valueConst);
//Value Type DataTypes
Console.WriteLine("Value Type");
int val1, val2;
val1 = 50;
Console.WriteLine("val1= {0}",val1);
val2 = val1;
Console.WriteLine("val1= {0} val2= {1}", val1,val2);
//Reference Type
Console.WriteLine("Reference Type");
vector x, y;
x = new vector();
x.value = 15;
y = x;
Console.WriteLine("x = {0} y = {1}", x.value,y.value);
y.value = 151;
Console.WriteLine("x = {0} y = {1}", x.value, y.value);
Console.WriteLine("\n Interger Types");
sbyte sb = 22;
short s = 22;
int i1 = 22;
long l = 22L;
Console.WriteLine("{0} sbtye\n{1} short\n{2} int\n{3}
long\n",sb,s,i1,l);
Console.WriteLine("Unsigned Integers");
byte b = 21;
ushort us = 21;
uint ui = 21;
ulong ul = 21;
Console.WriteLine("{0} btye\n{1} ushort\n{2} uint\n{3} ulong\n", b,
us, ui, ul);
Console.WriteLine("Floating Point");
float f = 11.22334455F;
```

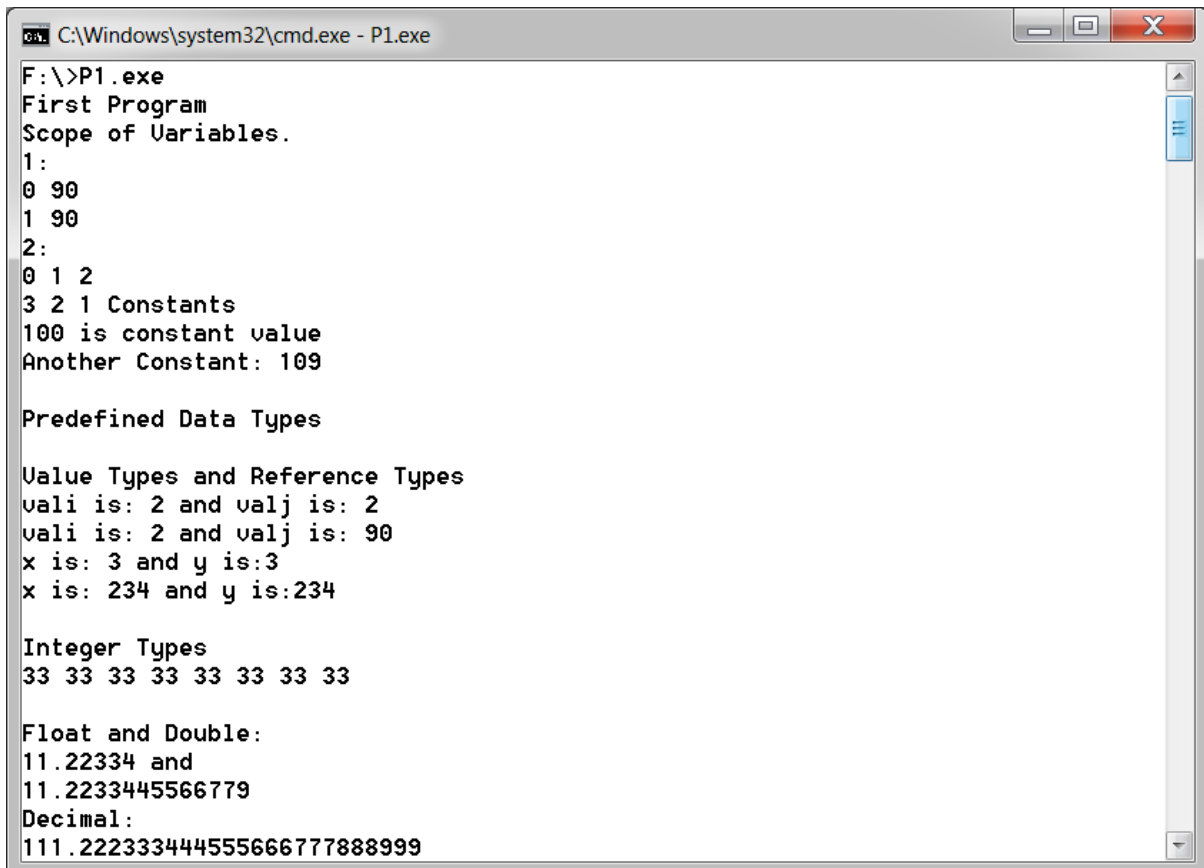
```
double d = 11.2233445566778899;
Console.WriteLine("{0} float\n{1} double", f, d);
decimal dec = 111.222333444555666777888999M;
Console.WriteLine("Decimal:\n{0}", dec);
Console.WriteLine("\nBoolean:");
bool valBoolean = true;
Console.WriteLine("Status: " + valBoolean);
Console.WriteLine("\nCharacter:\nSingle Quote \'");
Console.WriteLine("Double Quote \"");
Console.WriteLine("Back Slash \\");
char charA = 'A';
Console.WriteLine(charA);
int integerA = 2;
Console.WriteLine("Predefined Reference Type");
Object o1 = "This is object 1";
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 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);
Console.WriteLine("Flow control 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);
    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]);
    Console.ReadLine();
}
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;
    }
}
}
```



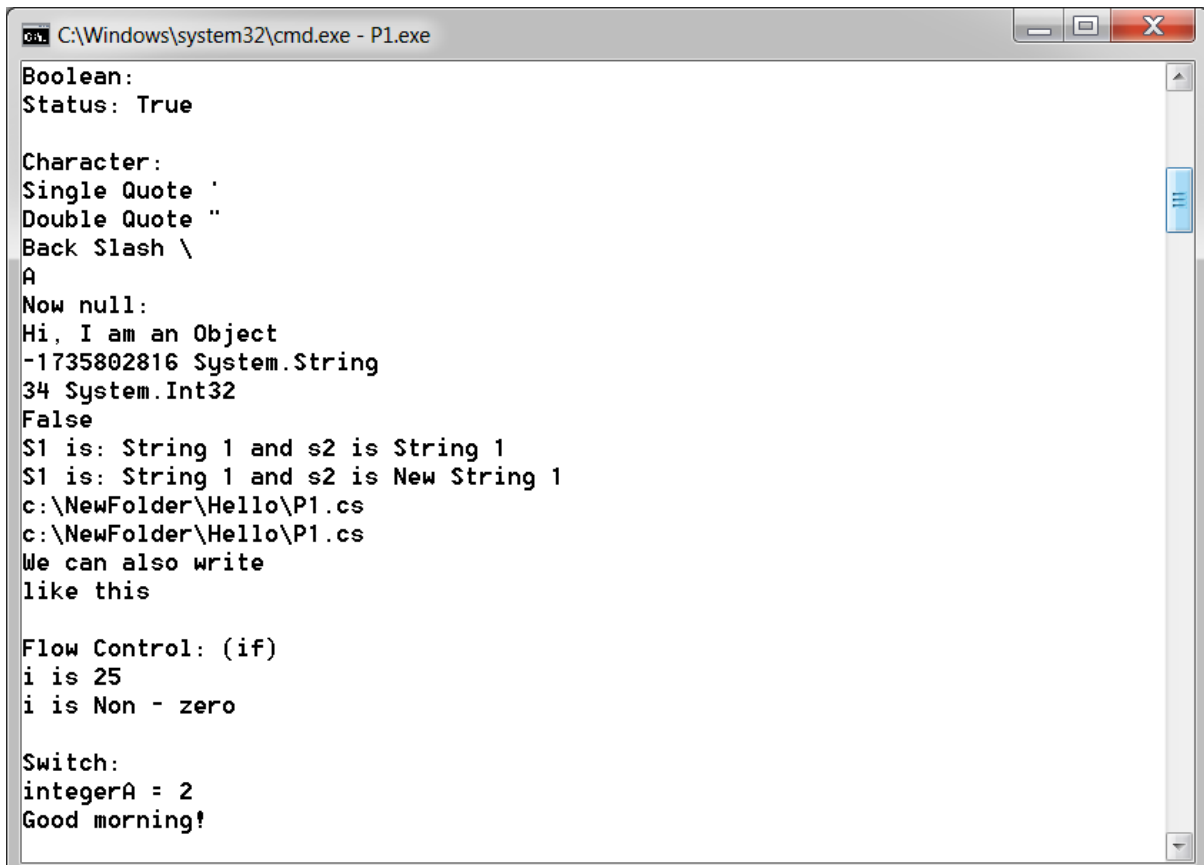
```
C:\Windows\system32\cmd.exe - P1.exe
F:\>P1.exe
First Program
Scope of Variables.
1:
0 90
1 90
2:
0 1 2
3 2 1 Constants
100 is constant value
Another Constant: 109

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
```



```
C:\Windows\system32\cmd.exe - P1.exe
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

Switch:
integerA = 2
Good morning!
```



## Practical 2

AIM:

GTUPrograms

Program 1:

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

@ @ @ @ @

@ @ @ @

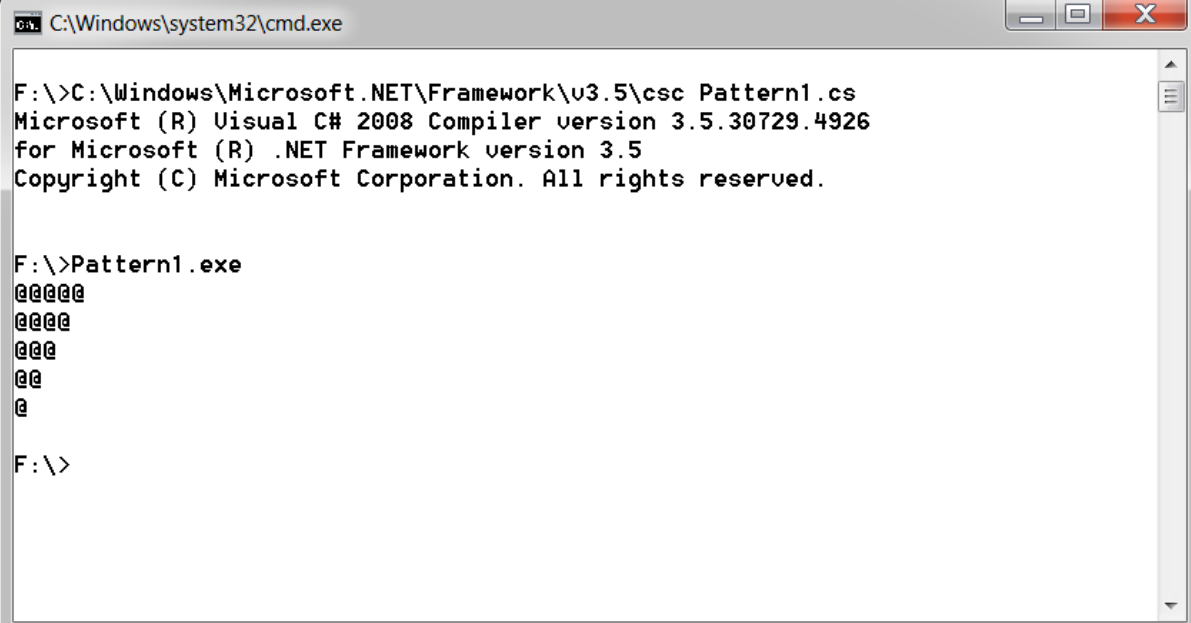
@ @ @

@ @

@

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

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



```
C:\Windows\system32\cmd.exe

F:\>C:\Windows\Microsoft.NET\Framework\v3.5\csc Pattern1.cs
Microsoft (R) Visual C# 2008 Compiler version 3.5.30729.4926
for Microsoft (R) .NET Framework version 3.5
Copyright (C) Microsoft Corporation. All rights reserved.

F:\>Pattern1.exe
@@@@@
@@@@@
@@@
@@
@
F:\>
```

## Program 2

**AIM:** 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;
```

```
namespace Pattern2
```

```
{
```

```
    class Program
```

```
    {
```

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

```
        {
```

```
            String s = Console.ReadLine();
```

```
            int value = int.Parse(s);
```

```
            for (int i = 1; i <= value; i++)
```

```
            {
```

```

        for (int j = 1; j <=i; j++)
        {
            Console.Write("{0} ",j);
        }
        Console.WriteLine();
    }
    Console.ReadKey();
}
}
}

```

```

C:\Windows\system32\cmd.exe - Pattern2.exe

F:\>C:\Windows\Microsoft.NET\Framework\v3.5\csc Pattern2.cs
Microsoft (R) Visual C# 2008 Compiler version 3.5.30729.4926
for Microsoft (R) .NET Framework version 3.5
Copyright (C) Microsoft Corporation. All rights reserved.

F:\>Pattern2.exe
10
1
1 2
1 2 3
1 2 3 4
1 2 3 4 5
1 2 3 4 5 6
1 2 3 4 5 6 7
1 2 3 4 5 6 7 8
1 2 3 4 5 6 7 8 9
1 2 3 4 5 6 7 8 9 10

```

### Program 3

**AIM:** 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;

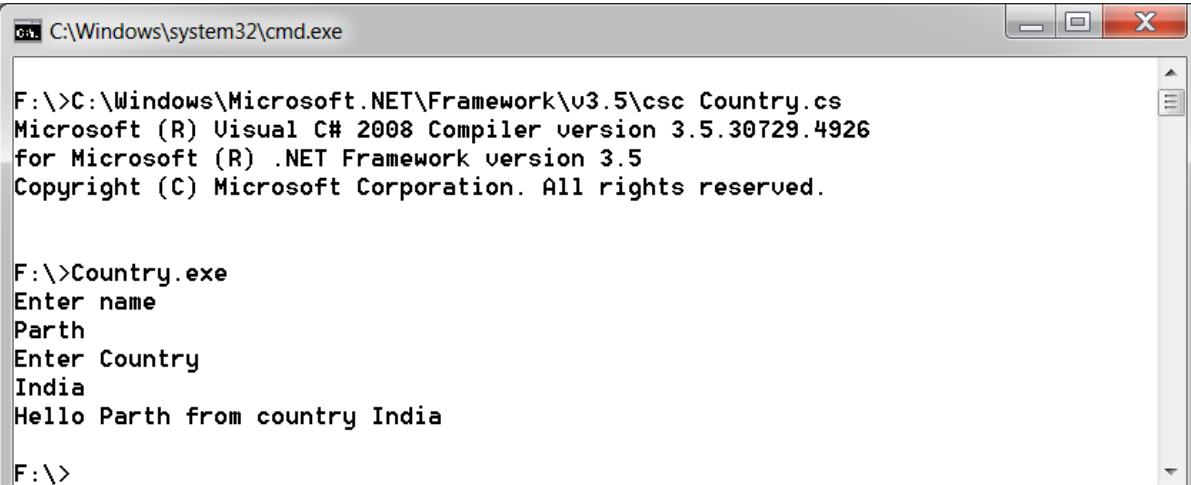
```

```

namespace PrintNameCountry
{
    class Program
    {

```

```
static void Main(string[] args)
{
    Console.WriteLine("Enter name");
    String name = Console.ReadLine();
    Console.WriteLine("Enter Country");
    String country = Console.ReadLine();
    Console.WriteLine("Hello {0} from country {1}", name, country);
    Console.ReadKey();
}
}
```



The screenshot shows a Windows command prompt window titled "C:\Windows\system32\cmd.exe". The command prompt displays the following text:

```
F:\>C:\Windows\Microsoft.NET\Framework\v3.5\csc Country.cs
Microsoft (R) Visual C# 2008 Compiler version 3.5.30729.4926
for Microsoft (R) .NET Framework version 3.5
Copyright (C) Microsoft Corporation. All rights reserved.

F:\>Country.exe
Enter name
Parth
Enter Country
India
Hello Parth from country India

F:\>
```

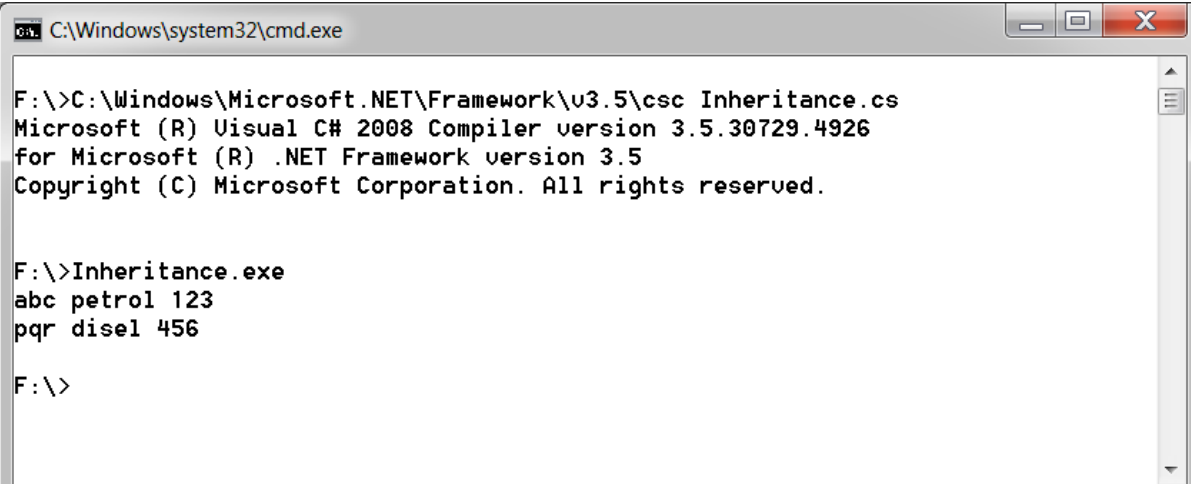
## Program 4

**AIM:** 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 Inheritance
{
    class Car
    {
        protected String name, fuel,id;
```

```
}  
class Maruti: Car  
{  
    internal Maruti(String name, String fuel, String id)  
    {  
        this.name = name;  
        this.fuel = fuel;  
        this.id = id;  
        Console.WriteLine("{0} {1} {2}",this.name, this.fuel, this.id);  
    }  
}  
class Mahindra : Car  
{  
    internal Mahindra(String name, String fuel, String id)  
    {  
        this.name = name;  
        this.fuel = fuel;  
        this.id = id;  
        Console.WriteLine("{0} {1} {2}",this.name, this.fuel, this.id);  
    }  
}  
class Program  
{  
    static void Main(string[] args)  
    {  
        Maruti obj1= new Maruti("abc","petrol","123");  
        Mahindra obj2 =new Mahindra("pqr","disel","456");  
        Console.ReadKey();  
    }  
}  
}
```



```
C:\Windows\system32\cmd.exe

F:\>C:\Windows\Microsoft.NET\Framework\v3.5\csc Inheritance.cs
Microsoft (R) Visual C# 2008 Compiler version 3.5.30729.4926
for Microsoft (R) .NET Framework version 3.5
Copyright (C) Microsoft Corporation. All rights reserved.

F:\>Inheritance.exe
abc petrol 123
pqr diesel 456

F:\>
```

## Practical 3

### AIM:

### Overloading

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

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

namespace MethodOverloading
{
    class Vector
    {
        internal int x, y, z;
        internal Vector(int x, int y, int z)
        {
            this.x = x;
            this.y = y;
            this.z = z;
        }
        internal Vector() { }
    }
    class Matrix
    {
        internal int [,] m = new int[2,2];
        internal Matrix(){}
    }
    class Program
    {
        static void add(int a, int b)
        {
            int temp = a + b;
            Console.WriteLine(temp);
        }
        static void add(Vector a, Vector b)
```

```
{
    Vector temp = new Vector();
    temp.x = a.x + b.x;
    temp.y = a.y + b.y;
    temp.z = a.z + b.z;
    Console.WriteLine("{0}x {1}y {2}z", temp.x, temp.y, temp.z);
}

static void add(Matrix a, Matrix b)
{
    Matrix temp = new Matrix();
    for (int i = 0; i < 2; i++)
    {
        for (int j = 0; j < 2; j++)
        {
            temp.m[i, j]=a.m[i,j]+b.m[i,j];
            Console.Write(temp.m[i, j]+"\\t");
        }
        Console.WriteLine("\\n");
        Console.WriteLine();
    }
}

static void Main(string[] args)
{
    Console.WriteLine("Enter Vector");
    Vector a = new Vector(int.Parse(Console.ReadLine()),
int.Parse(Console.ReadLine()), int.Parse(Console.ReadLine()));
    Vector b = new Vector(int.Parse(Console.ReadLine()),
int.Parse(Console.ReadLine()), int.Parse(Console.ReadLine()));
    add(a, b);
    Console.WriteLine("Enter integer");
    int x = int.Parse(Console.ReadLine());
    int y = int.Parse(Console.ReadLine());
    add(x, y);
    Console.WriteLine("Sum of Matrix is\\n");
    Matrix m1 = new Matrix();
    Matrix m2 = new Matrix();
    m1.m[0, 0] = 2;
    m1.m[0, 1] = 2;
    m1.m[1, 0] = 2;
```



```

        m1.m[1, 1] = 2;
        m2.m[0, 0] = 3;
        m2.m[0, 1] = 3;
        m2.m[1, 0] = 3;
        m2.m[1, 1] = 3;
        add(m1, m2);
        Console.ReadKey();
    }
}
}

```

```

C:\Windows\system32\cmd.exe
F:\>C:\Windows\Microsoft.NET\Framework\v3.5\csc MethodOverloading.cs
Microsoft (R) Visual C# 2008 Compiler version 3.5.30729.4926
for Microsoft (R) .NET Framework version 3.5
Copyright (C) Microsoft Corporation. All rights reserved.

F:\>MethodOverloading.exe
Enter Uector
10
20
10
10
20
10
20x 40y 20z
Enter integer
10
20
30
Sum of matrix is

5      5

5      5

F:\>

```

2. Write a c# program that create student object. Overload constror to create new instant with following details.

1. Name

2. Name, Enrollment

3. Name, Enrollment, Branch

```

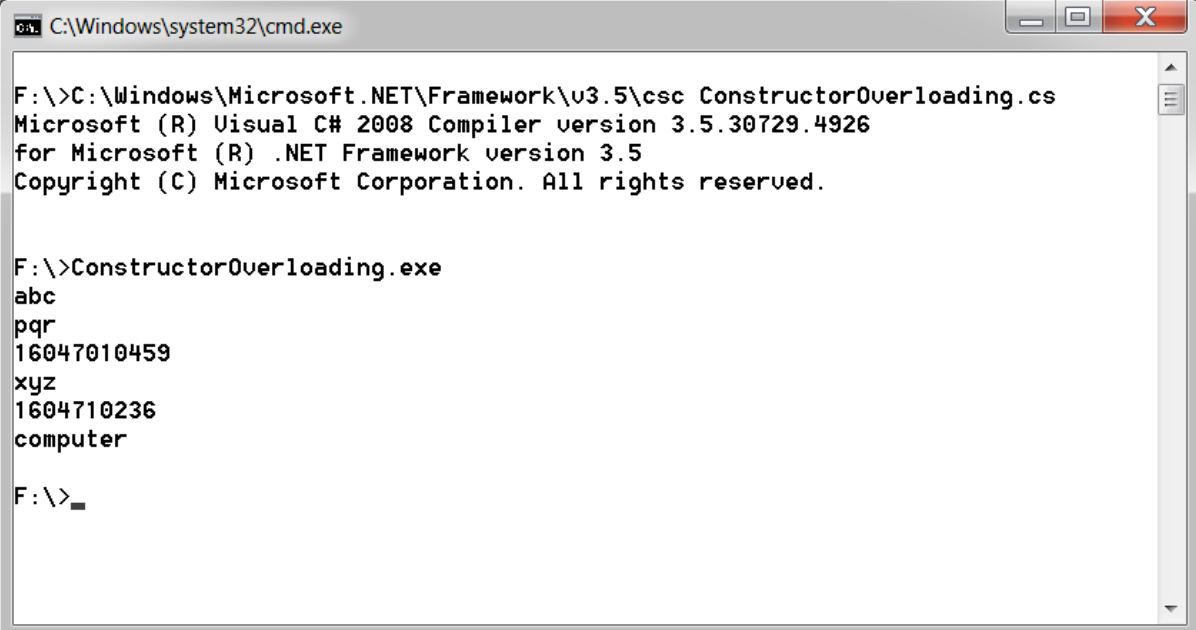
using System;
using System.Collections.Generic;
using System.Linq;

```

```
using System.Text;

namespace ConstructorOverloading
{
    class Student
    {
        String name,enroll_no,branch;
        public Student(String name)
        {
            this.name = name;
        }
        public Student(String name, String enroll_no)
        {
            this.name = name;
            this.enroll_no = enroll_no;
        }
        public Student(String name, String enroll_no, String branch)
        {
            this.name = name;
            this.enroll_no = enroll_no;
            this.branch = branch;
        }
        internal String getName()
        {
            return this.name;
        }
        internal String getEnroll()
        {
            return this.enroll_no;
        }
        internal String getBranch()
        {
            return this.branch;
        }
    }
    class Program
    {
        static void Main(string[] args)
        {
            Student s1 = new Student("abc");
        }
    }
}
```

```
        Console.WriteLine(s1.getName());  
        Student s2 = new Student("pqr", "16047010459");  
        Console.WriteLine(s2.getName());  
        Console.WriteLine(s2.getEnroll());  
        Student s3 = new Student("xyz", "1604710236", "computer");  
        Console.WriteLine(s3.getName());  
        Console.WriteLine(s3.getEnroll());  
        Console.WriteLine(s3.getBranch());  
        Console.ReadKey();  
    }  
}  
}
```



The screenshot shows a Windows command prompt window titled "C:\Windows\system32\cmd.exe". The prompt is at the F: drive. The user enters the command to compile the program: `F:\>C:\Windows\Microsoft.NET\Framework\v3.5\csc ConstructorOverloading.cs`. The output shows the Microsoft (R) Visual C# 2008 Compiler version 3.5.30729.4926 for Microsoft (R) .NET Framework version 3.5, with a copyright notice for Microsoft Corporation. The user then enters the command to run the program: `F:\>ConstructorOverloading.exe`. The output displays the program's execution results: `abc`, `pqr`, `16047010459`, `xyz`, `1604710236`, and `computer`. The prompt ends with `F:\>_`.

## Practical 4

**AIM:**

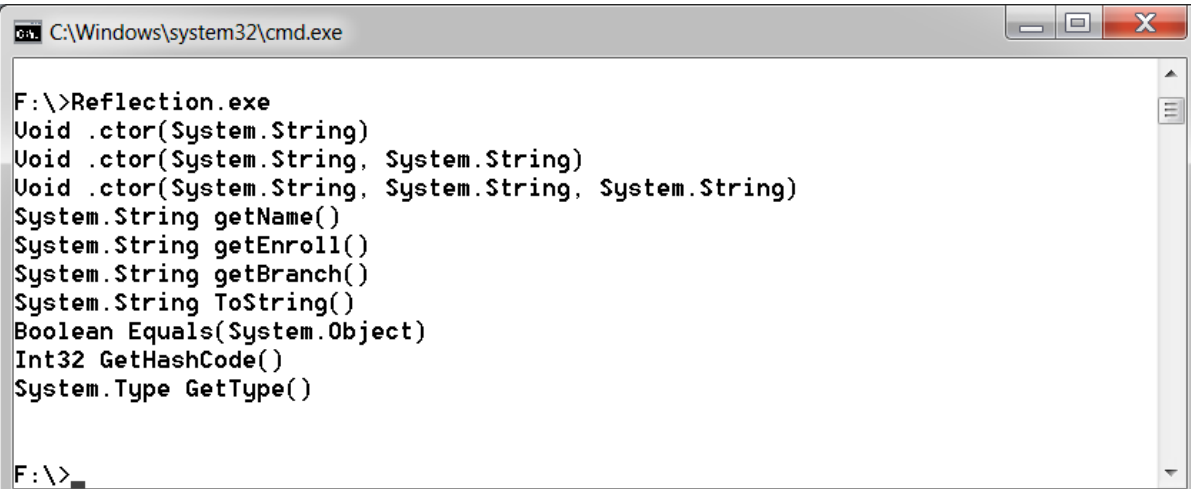
**Reflection API**

**1. Create a c# program to find Methods, Properties and Constructors from class of running program.**

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

namespace Reflection
{
    class Student
    {
        String name, enroll_no, branch;
        public Student(String name)
        {
            this.name = name;
        }
        public Student(String name, String enroll_no)
        {
            this.name = name;
            this.enroll_no = enroll_no;
        }
        public Student(String name, String enroll_no, String branch)
        {
            this.name = name;
            this.enroll_no = enroll_no;
            this.branch = branch;
        }
        public String getName()
        {
            return this.name;
        }
        public String getEnroll()
```

```
    {
        return this.enroll_no;
    }
    public String getBranch()
    {
        return this.branch;
    }
}
class Program
{
    static void Main(string[] args)
    {
        Type t = Type.GetType("Reflection.Student");
        ConstructorInfo[] ci = t.GetConstructors();
        MethodInfo[] mi = t.GetMethods();
        foreach (ConstructorInfo c in ci)
        {
            Console.WriteLine(c.ToString());
        }
        foreach (MethodInfo m in mi)
        {
            Console.WriteLine(m.ToString());
        }
        Console.ReadLine();
    }
}
```



The screenshot shows a Windows command prompt window titled "C:\Windows\system32\cmd.exe". The prompt is at "F:\>". The user has entered "Reflection.exe". The output lists the constructors and methods of the "Reflection.Student" class. The constructors are: "Void .ctor(System.String)", "Void .ctor(System.String, System.String)", and "Void .ctor(System.String, System.String, System.String)". The methods are: "System.String getName()", "System.String getEnroll()", "System.String getBranch()", "System.String ToString()", "Boolean Equals(System.Object)", "Int32 GetHashCode()", and "System.Type GetType()". The prompt is now "F:\>".

```
C:\Windows\system32\cmd.exe
F:\>Reflection.exe
Void .ctor(System.String)
Void .ctor(System.String, System.String)
Void .ctor(System.String, System.String, System.String)
System.String getName()
System.String getEnroll()
System.String getBranch()
System.String ToString()
Boolean Equals(System.Object)
Int32 GetHashCode()
System.Type GetType()
F:\>
```



## Practical 5

### AIM:

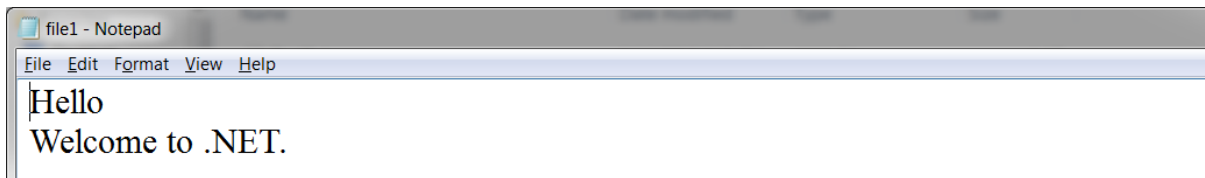
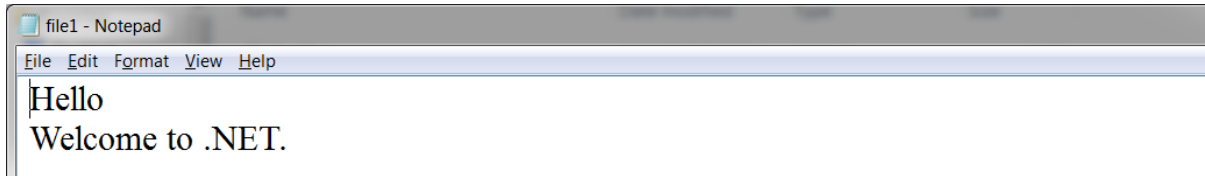
Perform File Handling.

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

### Program 1

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.IO;
namespace CopyFile1
{
    class Program
    {
        static void Main(string[] args)
        {
            String file1 = @"F:\file1.txt";
            String file2 = @"F:\file2.txt";
            using (StreamReader reader = new StreamReader(file1))
            {
                using (StreamWriter writer = new StreamWriter(file2))
                {
                    writer.Write(reader.ReadToEnd());
                }
            }
        }
    }
}
```

### FILE1:

**FILE2:**

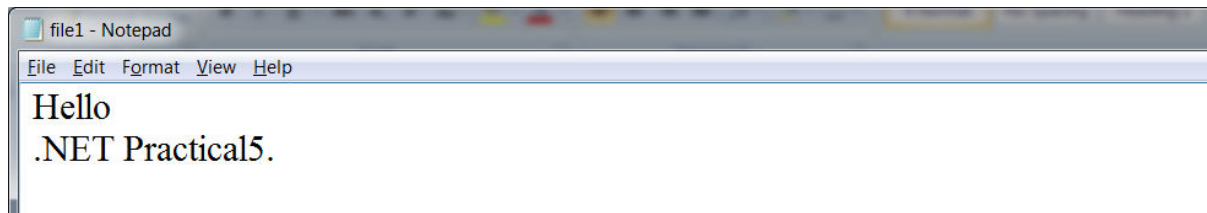
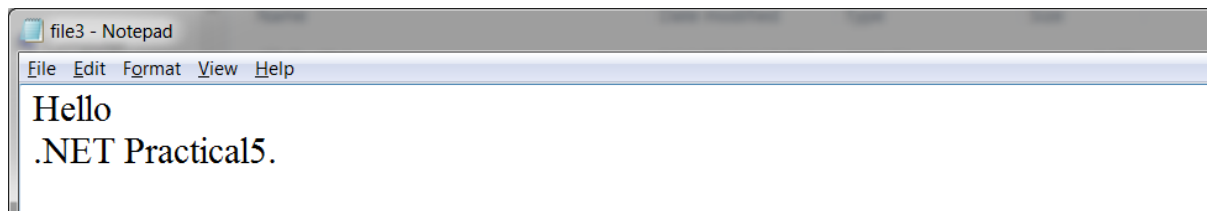
## 2. Write a C# Program to Read Lines from a File until the End of File is Reached.

### Program 2

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.IO;
namespace CopyFile2
{
    class Program
    {
        static void Main(string[] args)
        {
            String file1 = @"F:\file1.txt";
            String file2 = @"F:\file2.txt";
            String content = null;
            using (StreamReader reader = new StreamReader(file1))
            {
                using (StreamWriter writer = new StreamWriter(file2))
                {
                    while ((content = reader.ReadLine()) != null)
                    {
                        writer.WriteLine(content);
                    }
                }
            }
        }
    }
}
```

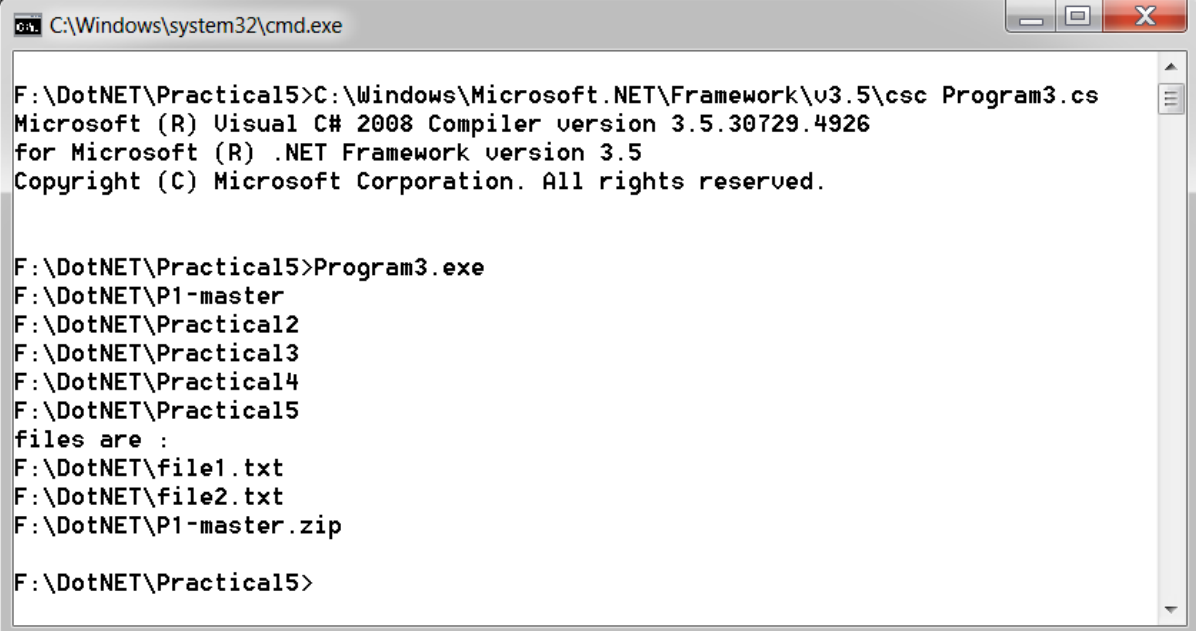


```
    }  
}
```

**FILE1:****FILE3:****3. Write a C# Program to List Files in a Directory.****Program 3**

```
using System;  
using System.Collections.Generic;  
using System.Linq;  
using System.Text;  
using System.IO;  
  
namespace filepractical3  
{  
    class Program  
    {  
        static void Main(string[] args)  
        {  
            String[] Directories = Directory.GetDirectories(@"F:\DotNET");  
            foreach (string dir in Directories)  
                Console.WriteLine(dir);  
            Console.WriteLine("files are :");  
            String[] files = Directory.GetFiles(@"F:\DotNET");  
            foreach (string file in files)  
                Console.WriteLine(file);  
            Console.ReadKey();  
        }  
    }  
}
```

}}}



```
C:\Windows\system32\cmd.exe

F:\DotNET\Practical15>C:\Windows\Microsoft.NET\Framework\v3.5\csc Program3.cs
Microsoft (R) Visual C# 2008 Compiler version 3.5.30729.4926
for Microsoft (R) .NET Framework version 3.5
Copyright (C) Microsoft Corporation. All rights reserved.

F:\DotNET\Practical15>Program3.exe
F:\DotNET\P1-master
F:\DotNET\Practical12
F:\DotNET\Practical13
F:\DotNET\Practical14
F:\DotNET\Practical15
files are :
F:\DotNET\file1.txt
F:\DotNET\file2.txt
F:\DotNET\P1-master.zip

F:\DotNET\Practical15>
```

## Practical 6

**AIM:**

**Windows Form Application**

**1.Create Windows Form Application for Student Registration and store student Details in DataBase.**

```
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 WindowsForm1
{
    public partial class Form1 : Form
    {
        string imgPath; public String gender;
        public Form1()
        {
            InitializeComponent();

            private void Form1_Load(object sender, EventArgs e)
            {

            }

            private void button1_Click(object sender, EventArgs e)
            {
                String          source          =          @"Data          Source=CE3COMP3\squlexpress;Initial
                Catalog=DBstudent;Integrated Security=True;Pooling=False";
```

```
        SqlConnection con = new SqlConnection(source);
        con.Open();
String    ins    =    "insert    into    Tbl1(fname,Middlename,Lname,gender,Date)
values('"+fname.Text+"','"+  Middlename.Text+  "','"+  Lname.Text  +  "','"+
+gender+"','"+ dateTimePicker1.Value.Date +"')";
        SqlCommand sc = new SqlCommand(ins, con);

        int i=sc.ExecuteNonQuery();
        if (i > -1)
        {
            MessageBox.Show("Entered into database");
        }
    }

    private void button3_Click(object sender, EventArgs e)
    {
        openFileDialog1.Filter = "Png|*.png";
        if (openFileDialog1.ShowDialog() == DialogResult.OK)
        {
            imgPath = @"C:\Users\CRP\Desktop\Images\"+ openFileDialog1.SafeFileName;
            pictureBox.Image = Image.FromFile(openFileDialog1.FileName);
        }
    }

    private void Male_CheckedChanged(object sender, EventArgs e)
    {
        if (Male.Checked)
        {
            gender = "Male";
        }
        else
        {
            gender = "Female";
        }
    }
}
```

WindowsFormsApp1 (Running) - Microsoft Visual Stud

Form1

NAME

ENROLL

BRANCH ☐ CE ☐ IT

SEMESTER

DateOfBirth

## Practical 7

### AIM:

#### ASP.NET Validation Control

#### RequiredFieldValidator

#### CompareValidator

#### RegularExpressionValidator

#### CustomValidator

#### RangeValidator

#### ValidationSummary

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="ASPWebApplication1.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>

            </div>
            name
            <asp:TextBox ID="Txtname" runat="server"></asp:TextBox>
            <asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server"
ControlToValidate="Txtname" ErrorMessage="name is required" ForeColor="Red"
ToolTip="Please enter name">*</asp:RequiredFieldValidator>
            <br />
                &nbsp;
            <br />
            email<asp:TextBox ID="Txtemail" runat="server"
                ontextchanged="TextBox1_TextChanged"></asp:TextBox>
```

```

<asp:RegularExpressionValidator ID="RegularExpressionValidator1" runat="server"
    ControlToValidate="Txtemail" ErrorMessage="not valid email address"
    ForeColor="Red" ToolTip="enter valid email"
    ValidationExpression="\w+([-+.']\w+)*@\w+([-.\w+)*\.\w+([-
.\w+)*"></asp:RegularExpressionValidator>
    <br />
    <br />
    phone no<asp:TextBox ID="Txtphone" runat="server"
        ontextchanged="Txtphone_TextChanged"></asp:TextBox>
<asp:RegularExpressionValidator ID="RegularExpressionValidator2" runat="server"
    ControlToValidate="Txtphone" ErrorMessage="not valid phone no" ForeColor="Red"
    ToolTip="enter 10 digit mobile no" ValidationExpression="[0-
9]{10}"></asp:RegularExpressionValidator>
    <br />
    <br />
    password<asp:TextBox ID="Txtpassword" runat="server"></asp:TextBox>
    <br />
    <br />
    confirm password<asp:TextBox ID="Txtcpasswoed" runat="server"></asp:TextBox>
    <asp:CompareValidator ID="CompareValidator1" runat="server"
        ControlToCompare="Txtpassword" ControlToValidate="Txtcpasswoed"
        ErrorMessage="confirm password not same as passord"
        ToolTip="not same as password" Type="Integer"></asp:CompareValidator>
    <br />
    <br />
    sem<asp:TextBox ID="Txtsem" runat="server"></asp:TextBox>
    <asp:RangeValidator ID="RangeValidator1" runat="server"
        ControlToValidate="Txtsem" ErrorMessage="not valid semester"
    MaximumValue="8"
        MinimumValue="1"></asp:RangeValidator>
    <br />
<asp:Button ID="Button1" runat="server" onclick="Button1_Click" Text="submit"/>
    <br />
    <asp:ValidationSummary ID="ValidationSummary1" runat="server" />
</form>
</body>
</html>

```

## OUTPUT :

email sd@sd.sdgd

phone no 456465

password 123

confirm password 123

sem 6

submit

- not valid phone no



## Practical 8

### AIM:

### Introduction to Master Pages.

#### Site1.Master

```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site1.master.cs"
Inherits="ASPApplication2.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>
</head>
<body>
    <form id="form1" runat="server">
        <table>
            <tr> <td>
                <asp:Label ID="lblheader" runat="server"
Text="header"></asp:Label></td></tr>
            <tr>
                <td>
                    <asp:Button ID="Buttonsearch" runat="server" Text="Button" />
                    <asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">
                    </asp:ContentPlaceHolder>
                </td>
            </tr>
            <tr><td>footer</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 ASPApplication2
{
    public partial class Site1 : System.Web.UI.MasterPage
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        public Label lblHeader
        {
            get { return lblheader; }
        }

        public Button buttonsearch
        {
            get { return Buttonsearch; }
        }

    }
}
```

### WebForm1.aspx

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="ASPApplication2.WebForm1" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1"
runat="server">
    <asp:TextBox ID="txtHeader" runat="server"></asp:TextBox>
```

```
<asp:Button ID="btn1" runat="server" Text="button"
    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 ASPApplication2
{
    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 = txtHeader.Text;
        }
    }
}
```

### OUTPUT :

hello

Button	hello	button
--------	-------	--------

footer

### WebForm2.aspx

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
Inherits="ASPApplication2.WebForm2" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1"
runat="server">
    <asp:GridView ID="getdetails" 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 ASPApplication2
{
    public partial class WebForm2 : System.Web.UI.Page
    {
        protected void Page_Init(object sender, EventArgs e)
        {
            ((Site1)Master).buttonsearch.Click+=new
EventHandler(buttonsearch_Click);
        }
        void buttonsearch_Click(object sender, EventArgs e)
        {
            getData();
        }
        protected void Page_Load(object sender, EventArgs e)
        {

        }
        void getData()
```

```

    {
        string source = @"Data Source=CE3COMP3\sqlexpress;Initial
Catalog=DBstudent;Integrated Security=True;Pooling=False";
        string select = "select * from Tbl1";
        SqlConnection conn = new SqlConnection(source);
        SqlCommand cmd = new SqlCommand(select, conn);
        conn.Open();
        SqlDataReader reader = cmd.ExecuteReader();
        getdetails.DataSource = reader;
        getdetails.DataBind();
        conn.Close();
    }
}

```

**OUTPUT :**

ABC

Footer

Header

search

A

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

Footer

## PRACTICAL 9

### AIM:

### Introduction to Web Service

#### Webfrom1.aspx.cs:

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

namespace radhika
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        webservice.WebService1 cal = new webservice.WebService1();

        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void btnadd_Click(object sender, EventArgs e)
        {

            lblresult.Text = cal.Add(Convert.ToInt16(txt1.Text),
            Convert.ToInt16(txt2.Text)).ToString();

        }

        protected void btnsub_Click1(object sender, EventArgs e)
```

```
{  
  
    lblresult.Text          =          cal.Sub(Convert.ToInt16(txt1.Text),  
    Convert.ToInt16(txt2.Text)).ToString();  
  
}  
  
protected void btnmul_Click1(object sender, EventArgs e)  
  
{  
  
    lblresult.Text          =          cal.Mul(Convert.ToInt16(txt1.Text),  
    Convert.ToInt16(txt2.Text)).ToString();  
  
}  
  
protected void btndiv_Click1(object sender, EventArgs e)  
  
{  
  
    lblresult.Text          =          cal.Div(Convert.ToInt16(txt1.Text),  
    Convert.ToInt16(txt2.Text)).ToString();  
  
}  
  
}  
  
}  
  
Webform1.designer.aspx.cs:  
namespace viral{  
  
    public partial class WebForm1 {  
  
        /// <summary>  
        /// form1 control.  
        /// </summary>  
        /// <remarks>  
        /// Auto-generated field.  
        /// To modify move field declaration from designer file to code-behind file.  
        /// </remarks>  
  
        protected global::System.Web.UI.HtmlControls.HtmlForm form1;
```

```
/// <summary>
/// txt1 control.
/// </summary>
/// <remarks>
/// Auto-generated field.
/// To modify move field declaration from designer file to code-behind file.
/// </remarks>
protected global::System.Web.UI.WebControls.TextBox txt1;

/// <summary>
/// RegularExpressionValidator1 control.
/// </summary>
/// <remarks>
/// Auto-generated field.
/// To modify move field declaration from designer file to code-behind file.
/// </remarks>
protected global::System.Web.UI.WebControls.RegularExpressionValidator
RegularExpressionValidator1;

/// <summary>
/// RequiredFieldValidator1 control.
/// </summary>
/// <remarks>
/// Auto-generated field.
/// To modify move field declaration from designer file to code-behind file.
/// </remarks>
protected global::System.Web.UI.WebControls.RequiredFieldValidator
RequiredFieldValidator1;

/// <summary>
```



```
/// txt2 control.
/// </summary>
/// <remarks>
/// Auto-generated field.
/// To modify move field declaration from designer file to code-behind file.
/// </remarks>
protected global::System.Web.UI.WebControls.TextBox txt2;

/// <summary>
/// RequiredFieldValidator2 control.
/// </summary>
/// <remarks>
/// Auto-generated field.
/// To modify move field declaration from designer file to code-behind file.
/// </remarks>
protected global::System.Web.UI.WebControls.RequiredFieldValidator
RequiredFieldValidator2;

/// <summary>
/// RegularExpressionValidator2 control.
/// </summary>
/// <remarks>
/// Auto-generated field.
/// To modify move field declaration from designer file to code-behind file.
/// </remarks>
protected global::System.Web.UI.WebControls.RegularExpressionValidator
RegularExpressionValidator2;

/// <summary>
/// btnadd control.
```

```
/// </summary>

/// <remarks>

/// Auto-generated field.

/// To modify move field declaration from designer file to code-behind file.

/// </remarks>

protected global::System.Web.UI.WebControls.Button btnadd;

/// <summary>

/// btnsub control.

/// </summary>

/// <remarks>

/// Auto-generated field.

/// To modify move field declaration from designer file to code-behind file.

/// </remarks>

protected global::System.Web.UI.WebControls.Button btnsub;

/// <summary>

/// btnmul control.

/// </summary>

/// <remarks>

/// Auto-generated field.

/// To modify move field declaration from designer file to code-behind file.

/// </remarks>

protected global::System.Web.UI.WebControls.Button btnmul;

/// <summary>

/// btndiv control.

/// </summary>

/// <remarks>

/// Auto-generated field.
```

```
/// To modify move field declaration from designer file to code-behind file.
```

```
/// </remarks>
```

```
protected global::System.Web.UI.WebControls.Button btndiv;
```

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

```
/// lblresult control.
```

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

```
/// <remarks>
```

```
/// Auto-generated field.
```

```
/// To modify move field declaration from designer file to code-behind file.
```

```
/// </remarks>
```

```
protected global::System.Web.UI.WebControls.Label lblresult;
```

```
}
```

```
}
```

```
WEBSERVICE.AMSX.CS:-
```

```
using System;
```

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

```
using System.Linq;
```

```
using System.Web;
```

```
using System.Web.Services;
```

```
namespace WebApplication1
```

```
{
```

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

```
/// Summary description for WebService1
```

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

```
[WebService(Namespace = "http://tempuri.org/")]
```

```
[WebServiceBinding(ConformsTo = WsiProfiles.BasicProfile1_1)]

[System.ComponentModel.ToolboxItem(false)]

// To allow this Web Service to be called from script, using ASP.NET AJAX,
uncomment the following line.

// [System.Web.Script.Services.ScriptService]

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;
}
}
```

**OUTPUT:**

1  
3

Add Sub Mul Div

4

---