

Lab Manual

.NET

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VVPEC CE Sem-6

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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;

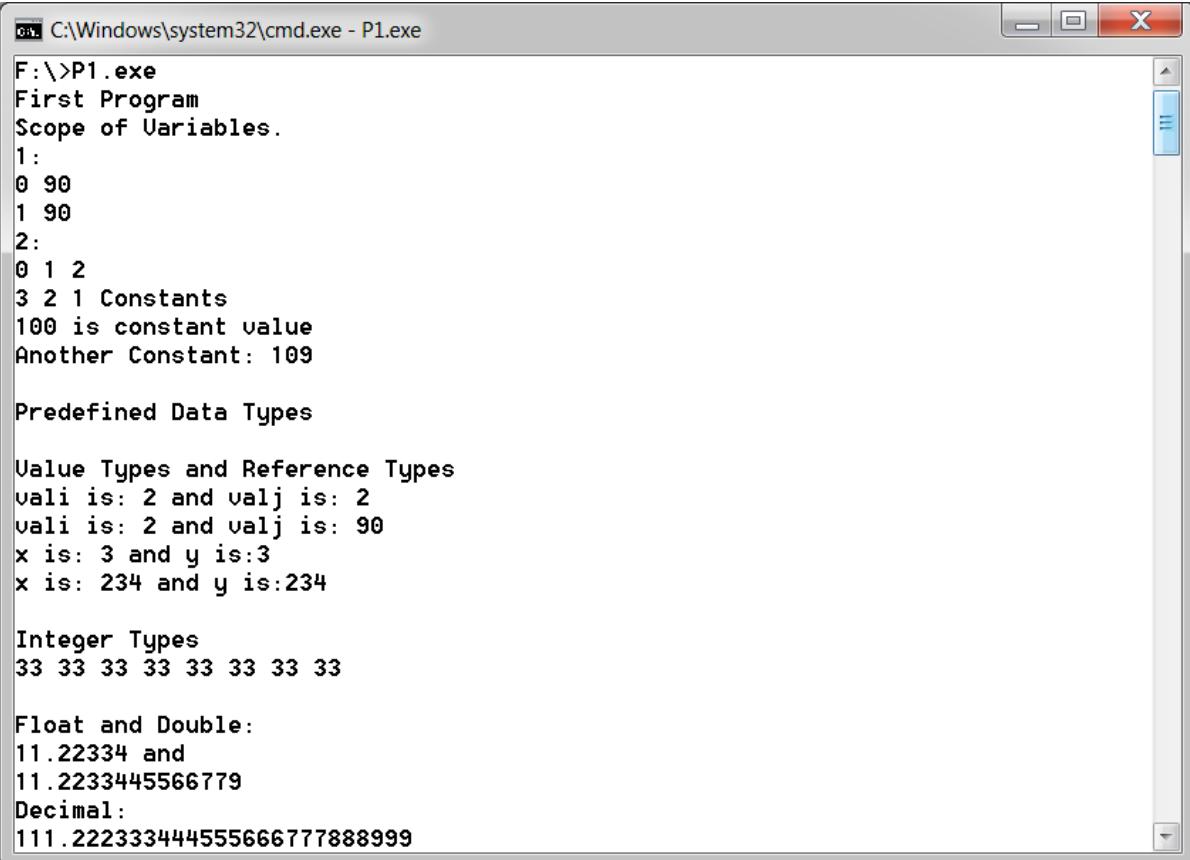
```
case 2:
    Console.WriteLine("integerA = 2");
    //goto case
    3; break;
case 3:
    Console.WriteLine("integerA = 3");
    break;
default:
    Console.WriteLine("integerA is not 1, 2, or 3");
    break;
}

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

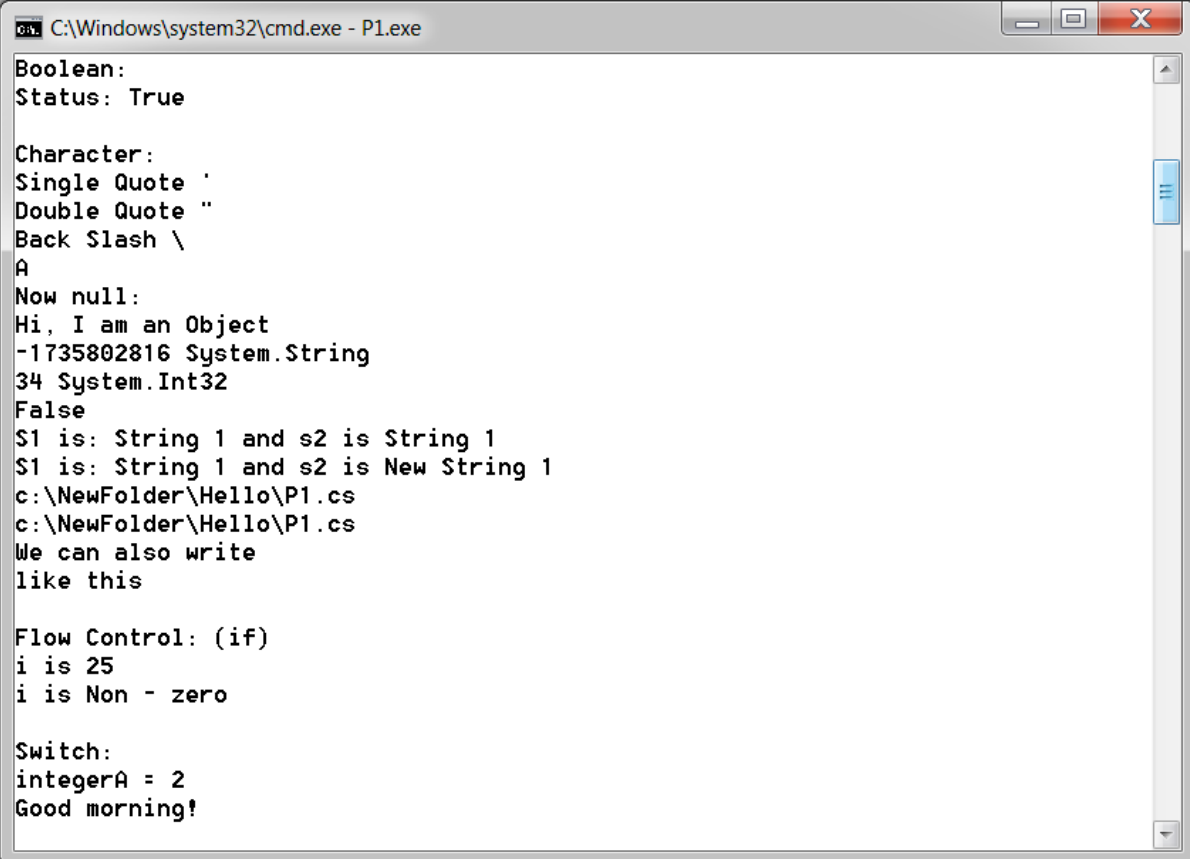
static void WriteGreeting(TimeOfDay timeOfDay)
{
    switch (timeOfDay)
    {
        case TimeOfDay.Morning:
            Console.WriteLine("Good
            morning!"); break;
        case TimeOfDay.Afternoon:
            Console.WriteLine("Good
            afternoon!"); break;
        case TimeOfDay.Evening: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

```
        {
```

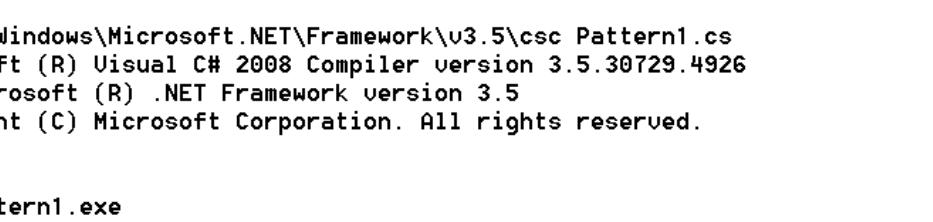
```
            for (int i = 5; i > 0; i--)
```

```
            {
```

```
                for (int j = 0; j < i; j++)
```

```
{  
    Console.WriteLine("@");
```

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



The screenshot shows a Windows command prompt window with the title bar "C:\Windows\system32\cmd.exe". The prompt is at the root of the F: drive. The user enters the command to compile a C# file: `F:\>C:\Windows\Microsoft.NET\Framework\v3.5\csc Pattern1.cs`. The output shows the Visual C# 2008 Compiler version 3.5.30729.4926 for .NET Framework version 3.5, with a copyright notice for Microsoft Corporation. The user then runs the compiled program: `F:\>Pattern1.exe`. The program outputs five lines of 'Q' characters, decreasing in count from 5 to 1.

```
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
QQQQQ
QQQQ
QQQ
QQ
Q

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++)
```

```
                {
```

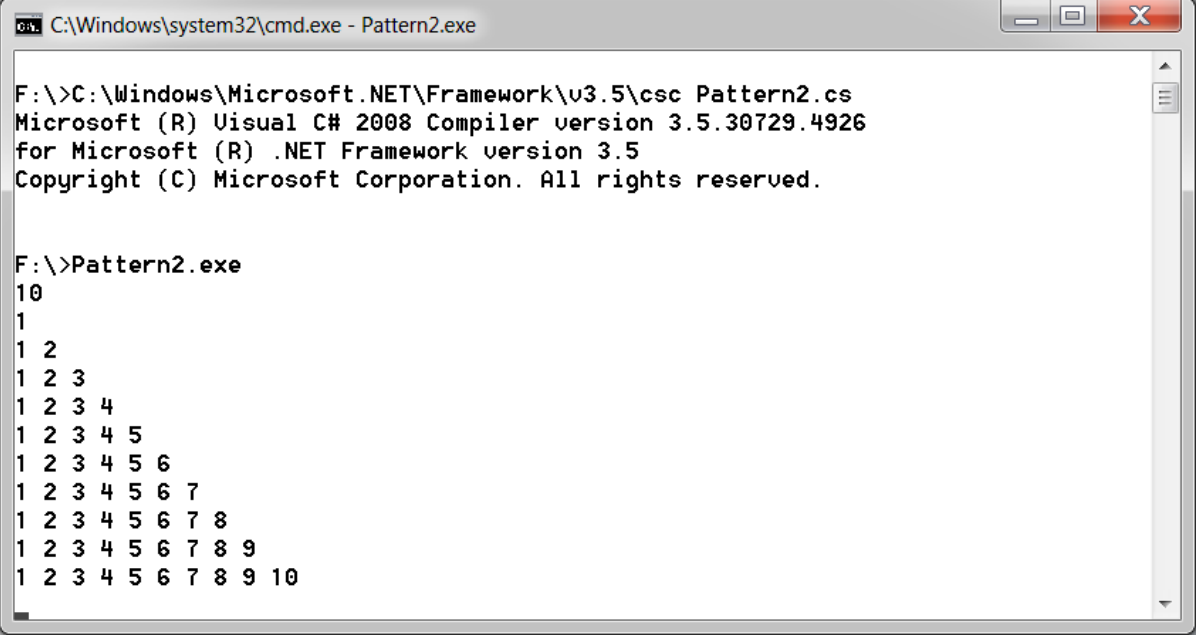
```
                    Console.Write("{0} ",j);
```

```
                }
```

```
                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();
```

```
        }
```

```
    }
```

```
}
```

Output:

E:\>Country.exe

Enter name

Hepi

Enter Country

India

Hello Hepi from country India

E:\>

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","diesel","456");
        Console.ReadKey();
    }
}
```

Output:

E:\>Inheritance.exe

abc petrol 123

pqr diesel 456

E:\>

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();
    }
}
```

160470107030
OVERLOADING

}

}

METHOD AND

```
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();

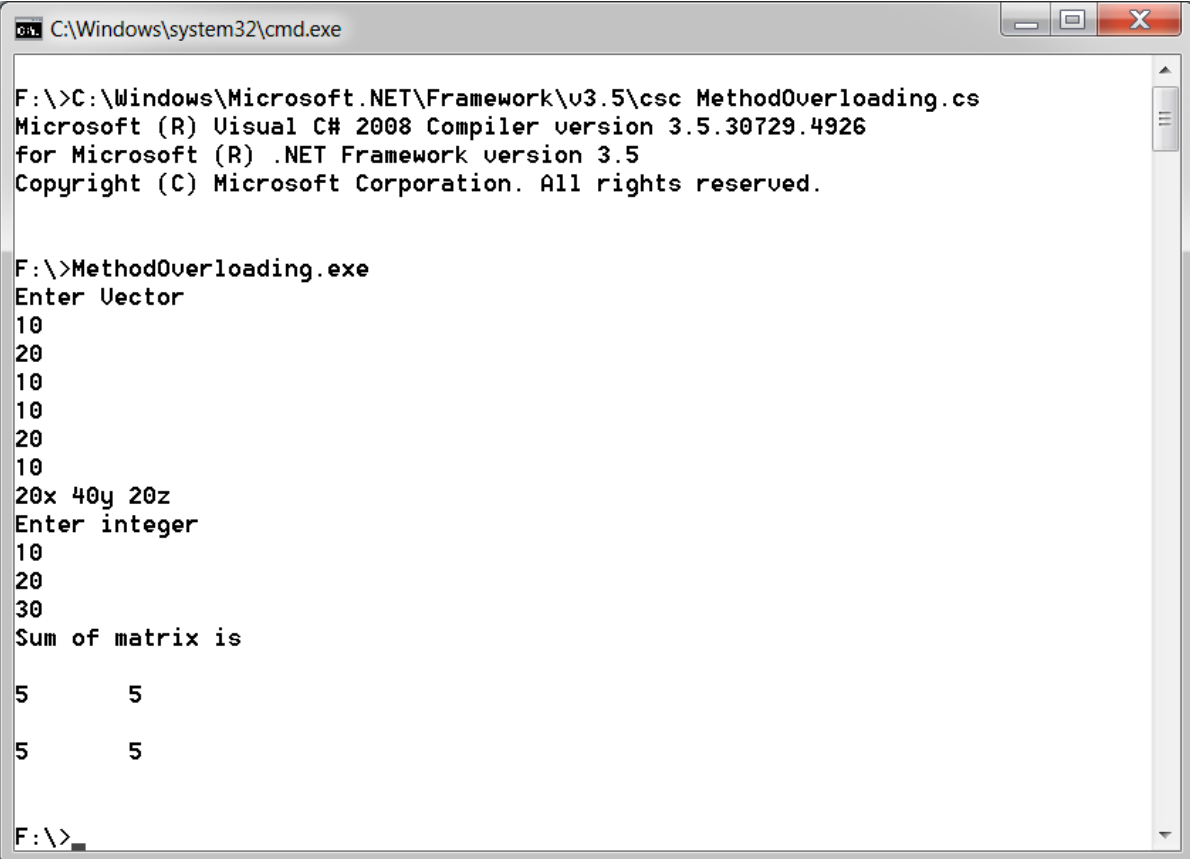
    Matrix m2 = new
Matrix(); m1.m[0, 0] =
2;
    m1.m[0, 1] = 2;
    m1.m[1, 0] = 2;
    m1.m[1, 1] = 2;
    m2.m[0, 0] = 3;
    m2.m[0, 1] = 3;
    m2.m[1, 0] = 3;
    m2.m[1, 1] = 3;
    add(m1, m2);

    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 Vector
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;
}

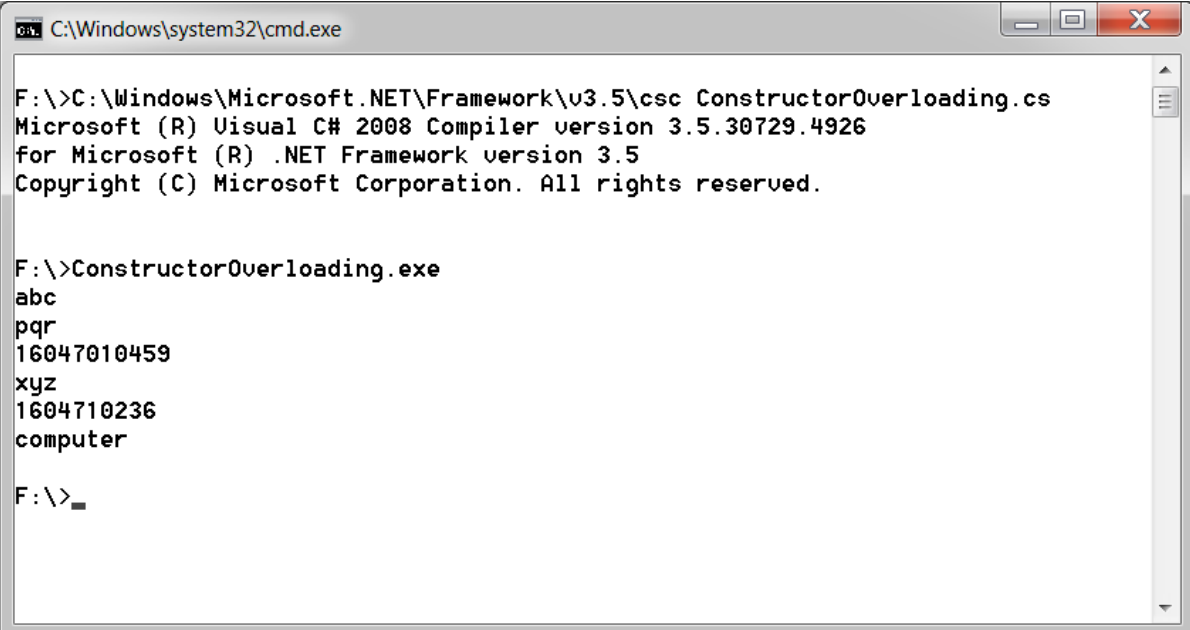
internal String getBranch()
{
    return this.branch;
}
```

}

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();
}
}
}
```



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

F:\>C:\Windows\Microsoft.NET\Framework\v3.5\csc ConstructorOverloading.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:\>ConstructorOverloading.exe
abc
pqr
16047010459
xyz
1604710236
computer

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;
}

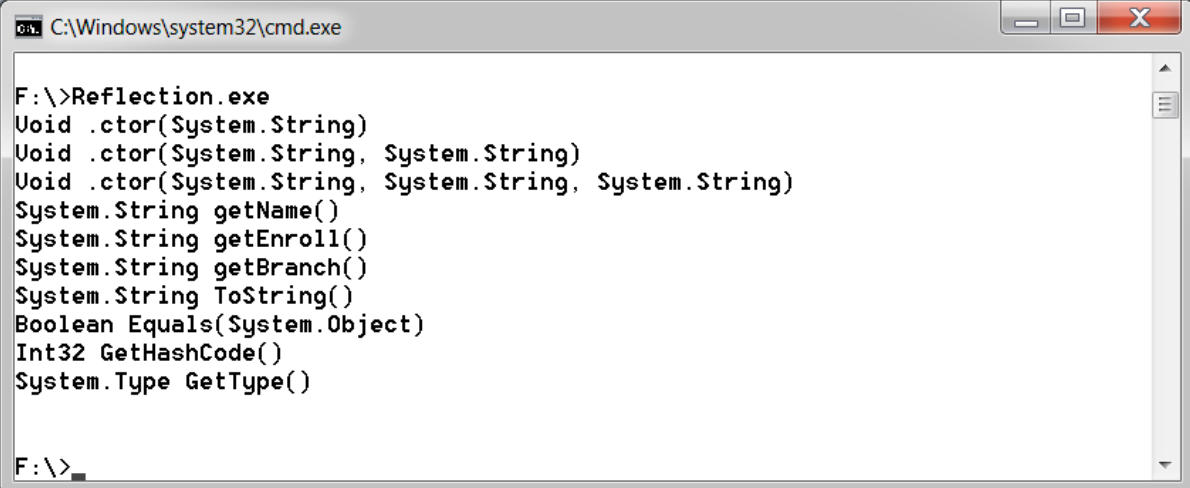
public String getName()
{
    return this.name;
}

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();  
}  
}
```



```
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

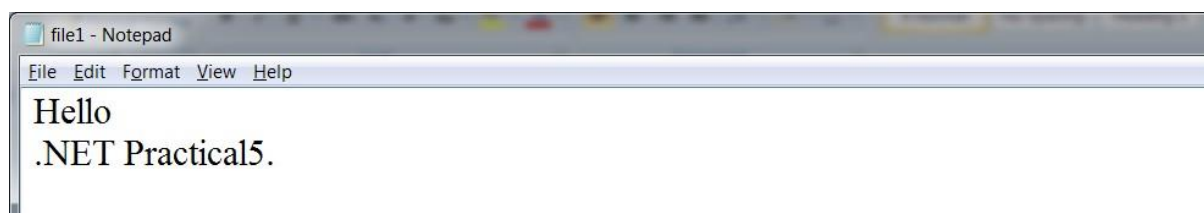
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.IO;
namespace CopyFile2
{
    class Program
    {
        static void Main(string[] args)
        {
            String      file1      =
            @"F:\file1.txt"; String file2
```

```
= @"F:\file2.txt"; String  
content = null;
```

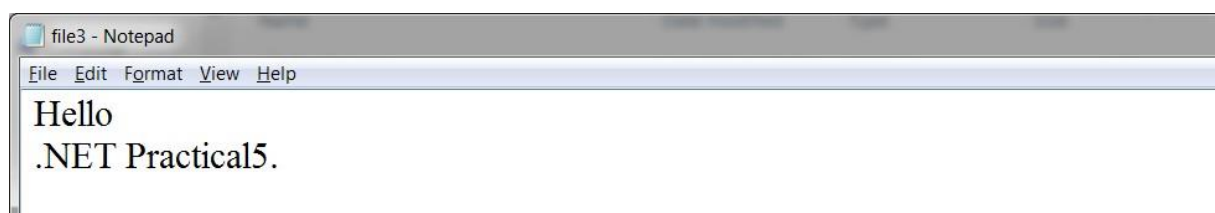


```
using (StreamReader reader = new StreamReader(file1))
{
    using (StreamWriter writer = new StreamWriter(file2))
    {
        while ((content = reader.ReadLine()) != null)
        {
            writer.WriteLine(content);
        }
    }
}
```

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 :");
```

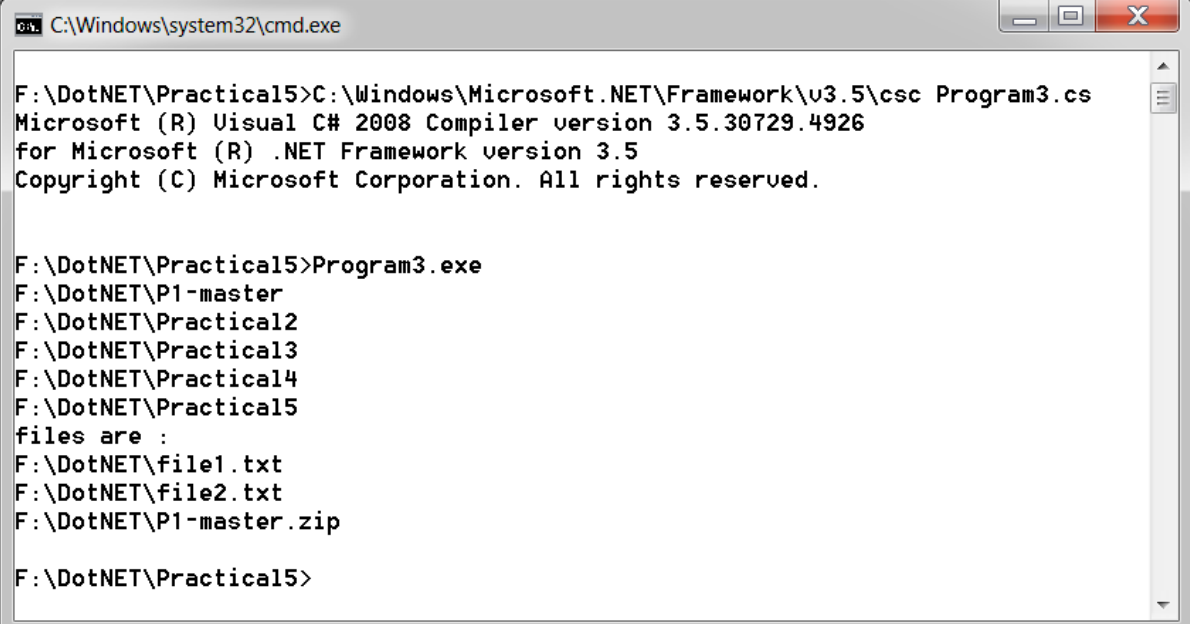
```
            String[] files =
```

```
            Directory.GetFiles(@"F:\DotNET"); foreach  
(string file in files)
```

```
                Console.WriteLine(file);
```

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

```
        }  
    }  
}
```



The screenshot shows a Windows command prompt window titled "C:\Windows\system32\cmd.exe". The user is in the directory "F:\DotNET\Practical15". They compile the program "Program3.cs" using the Visual C# 2008 compiler (version 3.5.30729.4926). The output shows the compilation was successful. Then, they run the program "Program3.exe". The program outputs the following text:

```
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\Practical2  
F:\DotNET\Practical3  
F:\DotNET\Practical4  
F:\DotNET\Practical5  
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 FormApplication 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\sqlexpress;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";
    }
}
}
```

First Name

Last Name

Gender ☒ Male ☐ Female

subject ☐ s1 ☐ s2

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

```

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="Ttxpassword" runat="server"></asp:TextBox>
<br />
<br />
confirm password<asp:TextBox ID="Ttxcpassword" runat="server"></asp:TextBox>
<asp:CompareValidator ID="CompareValidator1" runat="server"
    ControlToCompare="Ttxpassword" ControlToValidate="Ttxcpassword"
    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:

localhost:49482/WebForm1.aspx

Name

Password

C Password

Sem

Phone no

Email

- Password & cpassword must be same

Practical 8

AIM:

Introduction to Master Pages.

Site1.Master

```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site1.master.cs"
Inherits="ASPAplication2.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:



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					
ABC					

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

Footer

Practical 9

AIM:

Create Web Service of calculator and consume it.

WebService1.asmx.cs:

```
using System.Linq;
using System.Web;
using System.Web.Services;
namespace WebApplication6
{
    /// <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;
}

}

}
```

WebService1.aspx:

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication6.WebForm1" %>

<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">

</asp:Content>

<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1"
runat="server">

    <asp:Label ID="lblA" runat="server" Height="20px" style="text-align: center"
    Text="A" Width="130px"></asp:Label>
```

```
<br />  
<asp:TextBox ID="txtBoxA" runat="server"
```

```

ontextchanged="TextBox1_TextChanged"></asp:TextBox>
<asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server"
    ErrorMessage="RequiredFieldValidator"
    ControlToValidate="txtBoxA">abc</asp:RequiredFieldValidator>
<br />
<asp:Label ID="lblB" runat="server" Height="20px" style="text-align: center"
    Text="B" Width="126px"></asp:Label>
<br />
<asp:TextBox ID="txtBoxB" runat="server"
ontextchanged="TextBox2_TextChanged"></asp:TextBox>
<asp:RequiredFieldValidator ID="RequiredFieldValidator2" runat="server"
    ErrorMessage="RequiredFieldValidator"
    ControlToValidate="txtBoxB">abc</asp:RequiredFieldValidator>
<p>
    <asp:Button ID="btnAdd" runat="server" onclick="btnAdd_Click" Text="+" />
    <asp:Button ID="btnSub" runat="server" Text="-"
        onclick="btnSub_Click" style="width: 18px" />
    <asp:Button ID="btnMul" runat="server" Text="*" onclick="btnMul_Click" />
    <asp:Button ID="btnDiv" runat="server" onclick="Button4_Click" Text="/" />
</p>
<p>
    <asp:Label ID="lblResult" runat="server" Text="Result"></asp:Label>
</p>
</asp:Content>

```

WebService1.aspx.cs:

```

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

namespace WebApplication6
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        WebService1 calc = new WebService1();
    }
}

```

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

```
{  
}  
  
protected void TextBox2_TextChanged(object sender, EventArgs e)  
{  
}  
  
protected void TextBox1_TextChanged(object sender, EventArgs e)  
{  
}  
  
protected void Button4_Click(object sender, EventArgs e)  
{  
}  
  
protected void btnAdd_Click(object sender, EventArgs e)  
{  
    lblResult.Text = calc.Add(Convert.ToInt16(txtBoxA.Text),  
Convert.ToInt16(txtBoxB.Text)).ToString();  
}  
  
protected void btnSub_Click(object sender, EventArgs e)  
    lblResult.Text = calc.Sub(Convert.ToInt16(txtBoxA.Text),  
Convert.ToInt16(txtBoxB.Text)).ToString();  
}  
  
protected void btnMul_Click(object sender, EventArgs e)  
{  
    lblResult.Text = calc.Mul(Convert.ToInt16(txtBoxA.Text),  
Convert.ToInt16(txtBoxB.Text)).ToString();  
}  
  
protected void btnDiv_Click(object sender, EventArgs e)  
{  
    lblResult.Text = calc.Div(Convert.ToInt16(txtBoxA.Text),  
Convert.ToInt16(txtBoxB.Text)).ToString();  
}  
  
}
```

}

OUTPUT:

5
2
<div><div>+</div><div>-</div><div>*</div><div>/</div></div>
7