LAB Manual

.Net Technology

Jamang Chandni

160470107022

VVP Engineering College,Rajkot

Contents

Practical 1

AIM : Introduction to C#

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  Initialization

  Scope

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Predefined Data Types

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Flow Control

  Conditional Statements(if, switch)

  Loop(for, while, dowhile, foreach)

  Jump(goto, break, continue, return)

Eumerations

Passing Arguments

Program 1

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


namespace aim
{
    class Program
```

```
    {
              static int newint=100;
              public enum TimeOfDay
              {
              Morning = 0,
              Afternoon = 1,
              Evening = 2
              }
         public static void Main(string[] args)
         {
             Console.WriteLine("\n integer types");
             sbyte sb = 10;
             short s = 33;
             int i = 10;
             long l = 33L;
             byte b = 22;
             ushort us = 33;
             uint ul = 33u;
             ulong ulo = 33ul;
             Console.WriteLine("{0},{1},{2},{3},{4},{5},{6},{7}", sb, s, i, l, b, us,
ul, ulo);
             float f = 1.122345656767f;
             double d = 12.1234455657878797;
             Console.Write("\nFloat and Double:\n");
             Console.WriteLine("{0} and \n{1}", f, d);
                     decimal dec=111.6666666666666666666M;
                     Console.WriteLine("decimal:\n{0} ",dec);
                     Console.WriteLine("\nBoolean:");
```

```
                bool boolean =true;
                Console.WriteLine("Status: " + boolean);
        //  Console.ReadLine();
                char character ='d';
                Console.WriteLine(character);
                character = '\0';
                Console.WriteLine("Now null: " + character);
                object o1 = "Hi, I am ALICE";
                object o2 = 15.3454365;
                string strObj = o1 as string;
                Console.WriteLine(strObj);
                Console.WriteLine(o1.GetHashCode() + " " + o1.GetType());
                Console.WriteLine(o2.GetHashCode() + " " + o2.GetType());
                Console.WriteLine(o1.Equals(o2));
                string s1, s2;
                s1 = "this is string";
                s2 = s1;
                Console.WriteLine("S1 is: {0} and s2 is {1}", s1, s2);
                s2 = "other string";
                Console.WriteLine("S1 is: {0} and s2 is {1}", s1, s2);
                s1 = "c:C:\\Users\\Dell\\source\\repos\\aim";
                Console.WriteLine(s1);
                s1 = @"c:C:\Users\Dell\source\repos\aim\aim";
                Console.WriteLine(s1);
                s1 = @"We can also write
                like this";
                Console.WriteLine(s1);
                bool isZero;
```

```
Console.WriteLine("\nFlow Control: (if)\ni is " + i);
if (i == 10)
{
isZero = true;
Console.WriteLine("i is Zero {0}",isZero);
}
else
{
isZero = false;
Console.WriteLine("i is Non - zero");
}
int integerA = 1;
Console.WriteLine("\nSwitch:");
switch (integerA)
{
case 1:
Console.WriteLine("integerA = 1");
break;
case 2:
Console.WriteLine("integerA = 2");
//goto case 3;
break;
case 3:
Console.WriteLine("integerA = 3");
break;
default:
Console.WriteLine("integerA is not 1, 2, or 3");
break;}
```

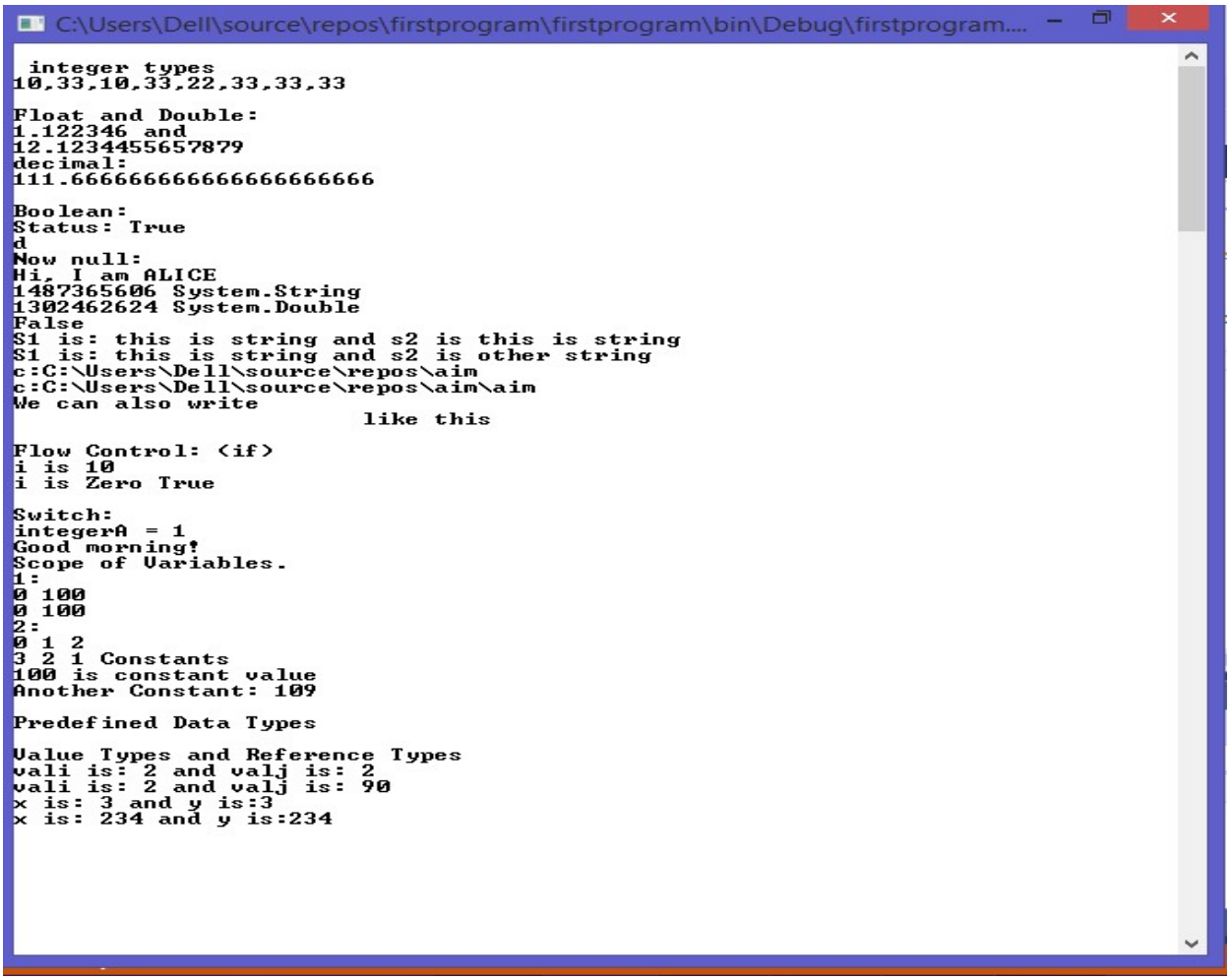
```
                    WriteGreeting(TimeOfDay.Morning);
                    Console.WriteLine("Argument is: {0}",args[1]);


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



                    }}
                    Console.WriteLine("Scope of Variables.\n1:");
            int newint=0;
                    int j;
            for (/*int*/ j = 0; j < 2; j++) //removing comment from for loop will
raise error
            {
```

```
                //int j;
                //uncomment above line to error "A local variable named 'j' cannot be
declared in this
                //scope because it would give a different meaning to 'j', which is
already
                //used in a 'parent or current' scope to denote something else"
                Console.Write("{0} {1}\n", newint, Program.newint);
            }
                    Console.WriteLine("2:");
            for (int k = 0; k < 3; k++)
            {
                Console.Write("{0} ", k);
            }//Scope of k ends here
            Console.Write("\n");
            //Console.Write(k);
            //uncomment above line to see error "The name 'k' does not exist in the
current context"
            for (int k = 3; k > 0; k--)
            {
                Console.Write("{0} ", k);
            }//scope of k ends here again


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

```
            //const only allow constant variables into the expression

            const int valConst2 = valConst + 9 /* + j*/;

            //remove comments from the above line to see error "The expression being
assigned to 'valConst2' must be constant"

            Console.WriteLine("Another Constant: {0}", valConst2);


            Console.WriteLine("\nPredefined Data Types\n\nValue Types and Reference
Types");

            //Value Types

            int vali = 2, valj = vali;

            Console.WriteLine("vali is: {0} and valj is: {1}", vali, valj);

            valj = 90;

            Console.WriteLine("vali is: {0} and valj is: {1}", vali, valj);

            //Referece Types

            Vector x, y;

            x = new Vector();

            x.value = 3;


            y = x;


            Console.WriteLine("x is: {0} and y is:{1}", x.value, y.value);

            y.value = 234;

            Console.WriteLine("x is: {0} and y is:{1}", x.value, y.value);

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

            y = null;

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

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

```
            //CTS


                    }


                    public class Vector
                    {
                    public int value;
                    }
        }
}
```

OutPut:


C:\Users\Dell\source\repos\firstprogram\firstprogram\bin\Debug\firstprogram....
integer types
10,33,10,33,22,33,33,33
Float and Double:
1.122346 and
12.1234455657879
decimal:
111.666666666666666666
Boolean:
Status: True
d
Now null:
Hi, I am ALICE
1487365606 System.String
1302462624 System.Double
False
S1 is: this is string and s2 is this is string
S1 is: this is string and s2 is other string
c:C:\Users\Dell\source\repos\aim
c:C:\Users\Dell\source\repos\aim\aim
We can also write
like this
Flow Control: (if)
i is 10
i is Zero True
Switch:
integerA = 1
Good morning!
Scope of Variables.
1:
0 100
0 100
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

Practical 2

AIM: Inheritance

Program 1

Perform following programs in c#.

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

@ @ @ @ @

@ @ @ @

@ @ @

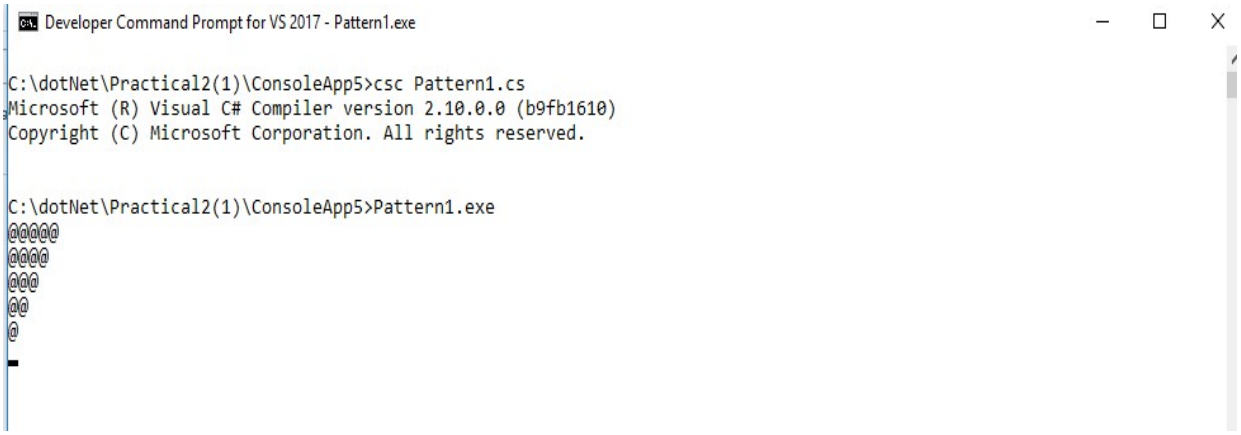
@ @

@

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


namespace practical2
{
    class Program
    {
        static void Main(string[] args)
        {
            for(int i=5;i>0;i--)
            {
                for (int j = i; j > 0; j--)
                {
                    Console.Write("@");
```

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

OutPut:



Program 2

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

1

1 2

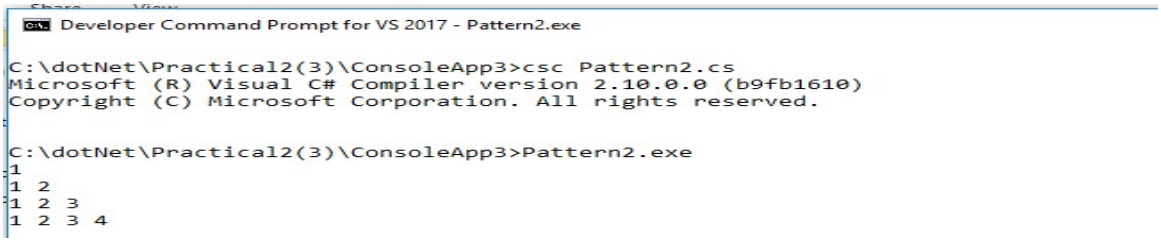
1 2 3

1 2 3 4

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

```
using System.Linq;

using System.Text;

using System.Threading.Tasks;


namespace practical2._1

{

    class Program

    {

        static void Main(string[] args)

        {

            for(int i=1;i<5;i++)

            {

                for(int j=1;j<=i;j++)

                {

           Console.Write(j+” ”);

                }

            Console.WriteLine();

            }

            Console.ReadKey();

        }

    }

}
```

OutPut:



Program 3

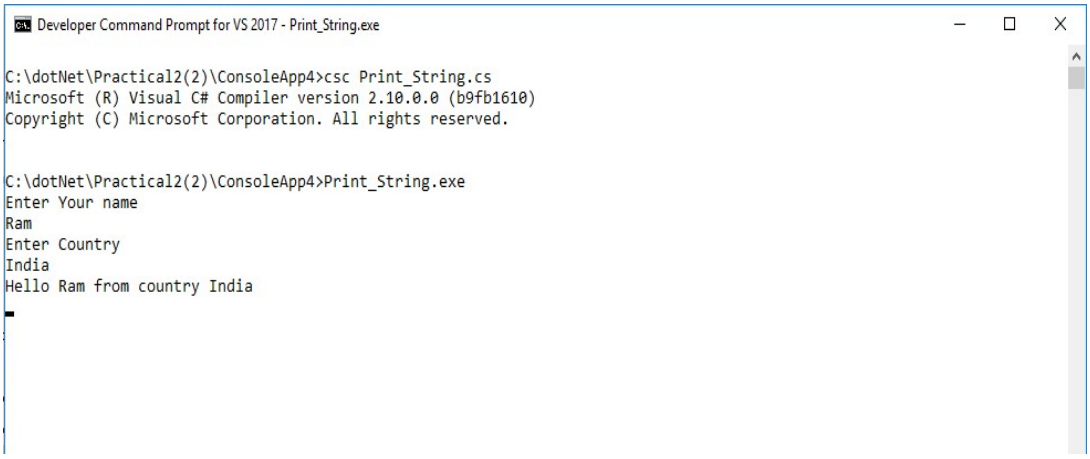
3. Write C# code to prompt a user to input his/her name and country name and then the output will be shown as an example below:

Hello Ram from country India

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;


namespace practical2._2

{

    class Program

    {

        static void Main(string[] args)

        {

            string name;

            string country;

            Console.WriteLine("enter your name:");

            name=Console.ReadLine();

            Console.WriteLine("enter your country:");

            country = Console.ReadLine();

            Console.WriteLine("hello {0} from country {1}",name,country);

            Console.ReadKey();

        }


    }
```

```
}
```

OutPut:



Program 4

4. What is inheritance? Create C# console application to define Car class and derive Maruti and Mahindra from it to demonstrate inheritance.

```
using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;


namespace practical2._3

{

    class car

    {

        public void Method1()

        {

            Console.WriteLine("this is the method of car class");
```

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

```
}
```

OutPut:


Developer Command Prompt for VS 2017 - Program.exe
C:\dotNet\Practical2(4)\Practical2(4)>csc Program.cs
Microsoft (R) Visual C# Compiler version 2.10.0.0 (b9fb1610)
Copyright (C) Microsoft Corporation. All rights reserved.
C:\dotNet\Practical2(4)\Practical2(4)>Program.exe
this is the method of car class
this is the method of car class
this is the method of maruti
this is the method of mahindra

Practical 3

AIM: Method & constructor overloading

Program 1

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

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

namespace Practical3
{
    class Program
    {
        public void add(int a, int b)
        {
            int sum = a + b;
            Console.WriteLine("Addition is:{0}", sum);
        }
        public void add()
        {
            int i, j, n;
            int[,] arr1 = new int[50, 50];
            int[,] brr1 = new int[50, 50];
            int[,] crr1 = new int[50, 50];
            Console.Write("Input the size of the square matrix: ");
```

```
n = Convert.ToInt32(Console.ReadLine());
Console.Write("Input elements in the first matrix :\n");
for (i = 0; i < n; i++)
{
    for (j = 0; j < n; j++)
    {
        Console.Write("{0},{1}:", i, j);
        arr1[i, j] = Convert.ToInt32(Console.ReadLine());
    }
}
Console.Write("Input elements in the Second matrix :\n");
for (i = 0; i < n; i++)
{
    for (j = 0; j < n; j++)
    {
        Console.Write("{0},{1}:", i, j);
        brr1[i, j] = Convert.ToInt32(Console.ReadLine());
    }
}
Console.Write("\nThe First matrix is :\n");
for (i = 0; i < n; i++)
{
    Console.Write("\n");
    for (j = 0; j < n; j++)
        Console.Write("{0}\t", arr1[i, j]);
}
Console.Write("\nThe Second matrix is :\n");
for (i = 0; i < n; i++)
```

```
            {
                Console.Write("\n");
                for (j = 0; j < n; j++)
                    Console.Write("{0}\t", brr1[i, j]);
            }
            for (i = 0; i < n; i++)
            {
                for (j = 0; j < n; j++)
                {
                    crr1[i, j] = arr1[i, j] + brr1[i, j];
                }
            }
            Console.Write("\nAddition of Two Matrix:\n");
            for (i = 0; i < n; i++)
            {
                Console.Write("\n");
                for (j = 0; j < n; j++)
                {
                    Console.Write("{0}\t", crr1[i, j]);
                }
            }
        }
        public void add(Vector a, Vector b)
        {
            Vector result=new Vector();
            result.x = a.x + b.x;
            result.y = a.y + b.y;
            result.z = a.z + b.z;
```

```
            Console.WriteLine("Addition of Two vectors is:");
            Console.WriteLine("<" + result.x + "," + result.y + "," + result.z +
">");
        }
    static void Main(string[] args)
    {
        Program p = new Program();
        Console.WriteLine("Value of a:");
        int a = Convert.ToInt32(Console.ReadLine());
        Console.WriteLine("Value of b:");
        int b = Convert.ToInt32(Console.ReadLine());
        p.add(a, b);
        p.add();
        Vector v1 = new Vector();
        Vector v2 = new Vector();
           // float x, y, z;
        Console.WriteLine("Enter 1st vector");
        Console.WriteLine("X:", v1.x);
       v1.x=Convert.ToInt32( Console.ReadLine());
            Console.WriteLine("Y:", v1.y);
           v1.y= Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("Z:", v1.z);
          v1.z=  Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("Enter 2nd vector");
            Console.WriteLine("X:", v2.x);
            v2.x = Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("Y:", v2.y);
            v2.y = Convert.ToInt32(Console.ReadLine());
```

```
            Console.WriteLine("Z:", v2.z);
            v2.z = Convert.ToInt32(Console.ReadLine());
            p.add(v1, v2);
            Console.ReadLine();
    }
}
    public class Vector
        {
           public float x, y,z;
        }
}
```

OutPut:

```
Developer Command Prompt for VS 2017 - Overloading.exe
Value of b:
1
Addition is:3
Input the size of the square matrix: 2
Input elements in the first matrix :
0,0:1
0,1:2
1,0:3
1,1:4
Input elements in the Second matrix :
0,0:5
0,1:6
1,0:7
1,1:8

The First matrix is :

1       2
3       4
The Second matrix is :

5       6
7       8
Addition of Two Matrix:

6       8
10      12
Enter 1st vector
X:
1
Y:
2
Z:
3

Enter 2nd vector
X:
4
Y:
5
Z:
6
Addition of Two vectors is:
<5,7,9>
```

Program 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;
using System.Threading.Tasks;

namespace P3_2_
{
    class Program
    {
        public int ID { get; set; }
        public string Name { get; set; }
        String name, branch;
        int enroll;
        Program(String Stname)
        {
            name = Stname;
            Console.WriteLine("1st Constructor:");
            Console.WriteLine("Student Name is "+Stname);
        }
        Program(String Stname,String Stbranch)
```

```
        {
            name = Stname;
            branch = Stbranch;
            Console.WriteLine("2nd Constructor:");
            Console.WriteLine(Stname+" is in "+Stbranch+" branch");
        }
        Program(String Stname, String Stbranch ,int Stenroll)
        {
            name = Stname;
            branch = Stbranch;
            enroll = Stenroll;
            Console.WriteLine("3rd Constructor:");
            Console.WriteLine(Stname + " is in " + Stbranch+" having "+Stenroll+"
Enrollment ");
        }
        static void Main(string[] args)
        {
            Program p = new Program("bob");
            Program p1 = new Program("bob",1);
            Program p2 = new Program("bob",1,"Computer");
            Console.ReadLine();



        }
    }
}
```

OutPut:

Practical 4

AIM: Reflection

Program 1

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



namespace p3a1
{
    class Program
    {
        public int ID { get; set; }
        public string Name { get; set; }
        String name, branch;
        int enrol;
 public void printID()
         {
             Console.WriteLine("ID is: {0}", this.ID);
         }
         public void printName()
         {
             Console.WriteLine("Name is: {0}", this.Name);
```

```
 }
        public Program(String name)
        {
            this.name = name;
            Console.WriteLine("constructor 1:" + name);
        }
        public Program(String name, int enrol)
        {
            this.name = name;
            this.enrol = enrol;
            Console.WriteLine("constructor 2:" + name + " " + enrol);

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

        }
        static void Main(string[] args)
        {
 try
             {
                 Type T = Type.GetType("p3a1.Program");
                 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());
                }

            Program p1 = new Program("bob");
            Program p2 = new Program("bob", 1);
            Program p3 = new Program("bob", 1, "computer");



            Console.ReadLine();

 catch (Exception e)
            {
```

```
                Console.WriteLine(e);
                Console.ReadLine();


            }
        }
    }
}
```

Practical 5

AIM: Files Operations

Program 1

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.Threading.Tasks;
using System.IO;


namespace Practical5
{
    class Program
    {
        static void Main(string[] args)
        {
            CopyFile cp = new CopyFile();
            String file1= @"C:\dotNet\file1.txt";
            String file2 = @"C:\dotNet\richa\file2.txt";
            cp.copyFile(file1, file2);
        }
    }
    public class CopyFile
    {
        public void copyFile(String file1,String file2)
```

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


                    }
                }
            }
        }
    }
}
```

OutPut:

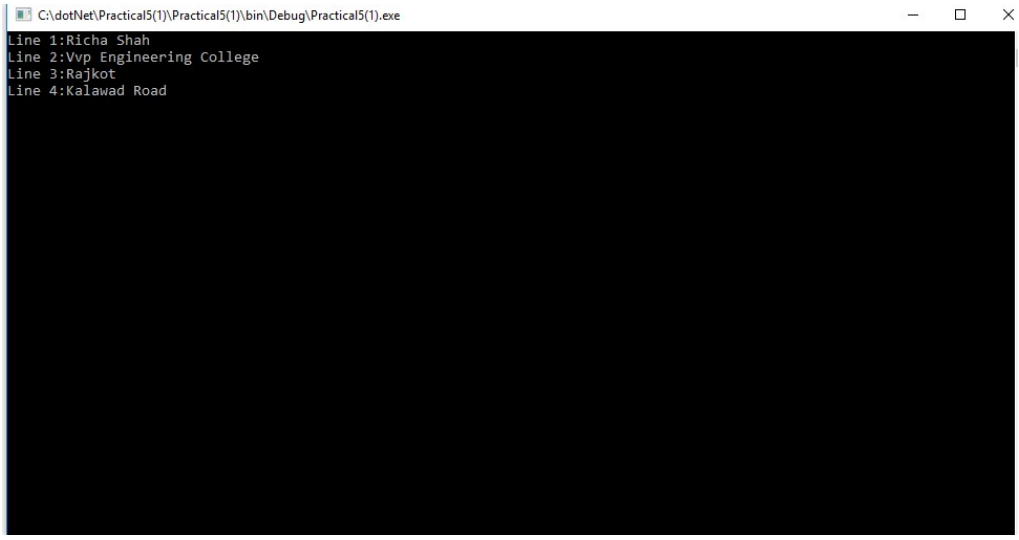
Program 2

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.Threading.Tasks;
using System.IO;

namespace Practical5_1_
{
    class Program
   {
        static void Main()
        {
            StreamReader reader = new StreamReader("teststream.txt");
            using (reader)
            {
                int lineNumber = 0;
                String line = reader.ReadLine();
                while(line!=null)
                {
                    lineNumber++;
                    Console.WriteLine("Line {0}:{1}", lineNumber, line);
                    line = reader.ReadLine();
                }
                Console.ReadLine();
```

```
            }
        }
    }
}
```

Output:


C:\dotNet\Practical5(1)\Practical5(1)\bin\Debug\Practical5(1).exe
Line 1:Richa Shah
Line 2:Vvp Engineering College
Line 3:Rajkot
Line 4:Kalawad Road

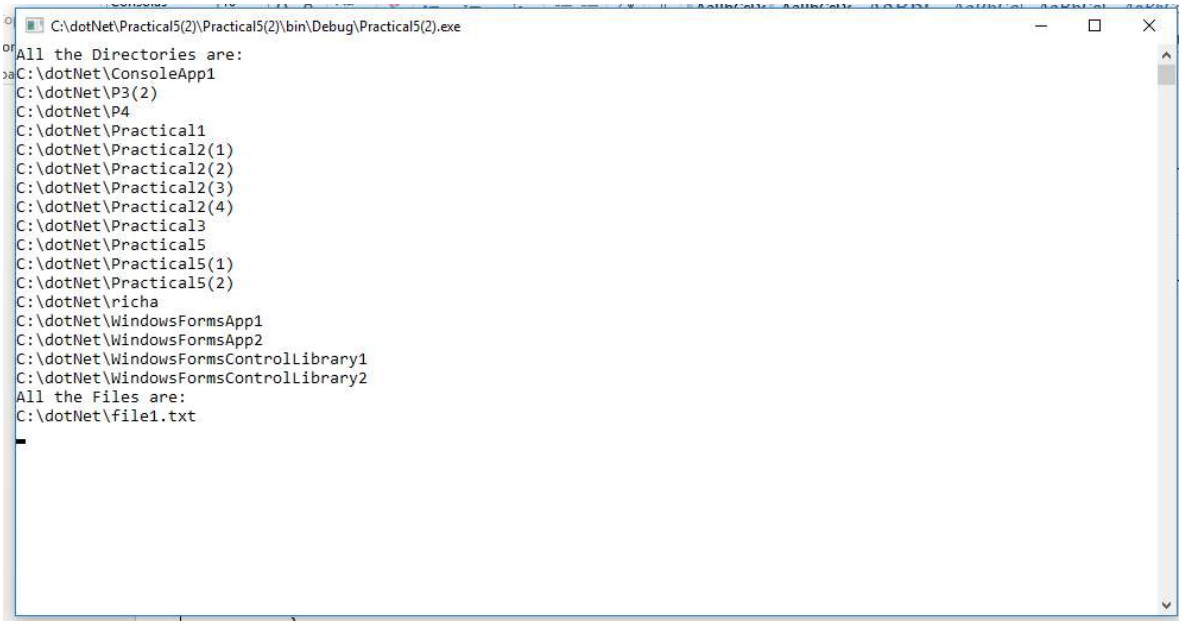
Program 3

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.Threading.Tasks;

using System.IO;


namespace Practical5_2_

{

    class Program

    {

        static void Main(string[] args)

        {

           string[] Directories =
Directory.GetDirectories(@"C:\Users\RICHA\source\repos");

            Console.WriteLine("All the Directories are:");

            foreach (string dir in Directories)

            {

                //Console.WriteLine("All the Directories are:");

                Console.WriteLine(dir);

            }

            string[] files = Directory.GetFiles(@"C:\Users\RICHA\source\repos");

            Console.WriteLine("All the Files are:");

            foreach (string file in files)

            {

               // Console.WriteLine("All the Files are:");
```

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

Output:


C:\dotNet\Practical5(2)\Practical5(2)\bin\Debug\Practical5(2).exe
All the Directories are:
C:\dotNet\ConsoleApp1
C:\dotNet\P3(2)
C:\dotNet\P4
C:\dotNet\Practical1
C:\dotNet\Practical2(1)
C:\dotNet\Practical2(2)
C:\dotNet\Practical2(3)
C:\dotNet\Practical2(4)
C:\dotNet\Practical3
C:\dotNet\Practical5
C:\dotNet\Practical5(1)
C:\dotNet\Practical5(2)
C:\dotNet\richa
C:\dotNet\WindowsFormsApp1
C:\dotNet\WindowsFormsApp2
C:\dotNet\WindowsFormsControlLibrary1
C:\dotNet\WindowsFormsControlLibrary2
All the Files are:
C:\dotNet\file1.txt

Practical 6

AIM: Student Registration

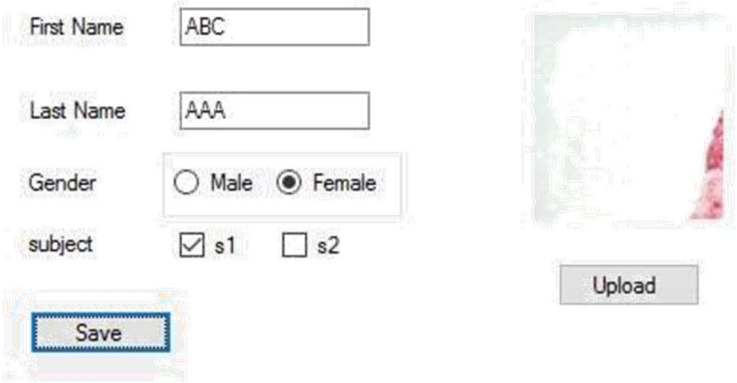
Program 1

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.Threading.Tasks;
using System.Windows.Forms;
using System.Data.SqlClient;
using System.IO;


namespace P6_form_
{
publicpartialclassForm1 : Form
    {
string imgPath;
public Form1()
        {
            InitializeComponent();
        }

privatevoid label1_Click(object sender, EventArgs e)
        {

        }

privatevoid Form1_Load(object sender, EventArgs e)
        {

        }

privatevoid button3_Click(object sender, EventArgs e)
        {
            Environment.Exit(0);
        }

privatevoid button2_Click(object sender, EventArgs e)
        {
string source = @"C:\DOTNET\P6(FORM)\P6(FORM)\PROPERTIES\DATABASE1.MDF";
string select = "select count(*) from tblStudent";
            SqlConnection conn = new SqlConnection(source);
            SqlCommand cmd = new SqlCommand(select, conn);
            conn.Open();
int i = Convert.ToInt16(cmd.ExecuteScalar());
int textBox1 = i + 1;
```

```
string insert = "insert into tblStudent(Name,Email,Phone No,Gender,Address,imgStudent)
values ( " + textBox1 + ",'" + textBox3 + "','" + textBox4 + "','" + radioButton1 + "','"
+ richTextBox1 + "','" + (imgPath == null ? "" : imgPath) + "' )";
            cmd = new SqlCommand(insert, conn);

            i = cmd.ExecuteNonQuery();
//object imgStudent = null;
if (imgPath != null)
           imgStudent.Image.Save(imgPath);
            MessageBox.Show("You are Done!!!");
            InitializeComponent();
        }


privatevoid button1_Click(object sender, EventArgs e)
        {
            openFileDialog1.Filter = "Jpg|*.jpg";
if (openFileDialog1.ShowDialog() == DialogResult.OK)
            {
                imgPath = @"C:\Pictures" + openFileDialog1.SafeFileName;
                imgStudent.Image = Image.FromFile(openFileDialog1.FileName);
            }

        }
    }
}
```

Output:



Practical 7

AIM: Validation Controls

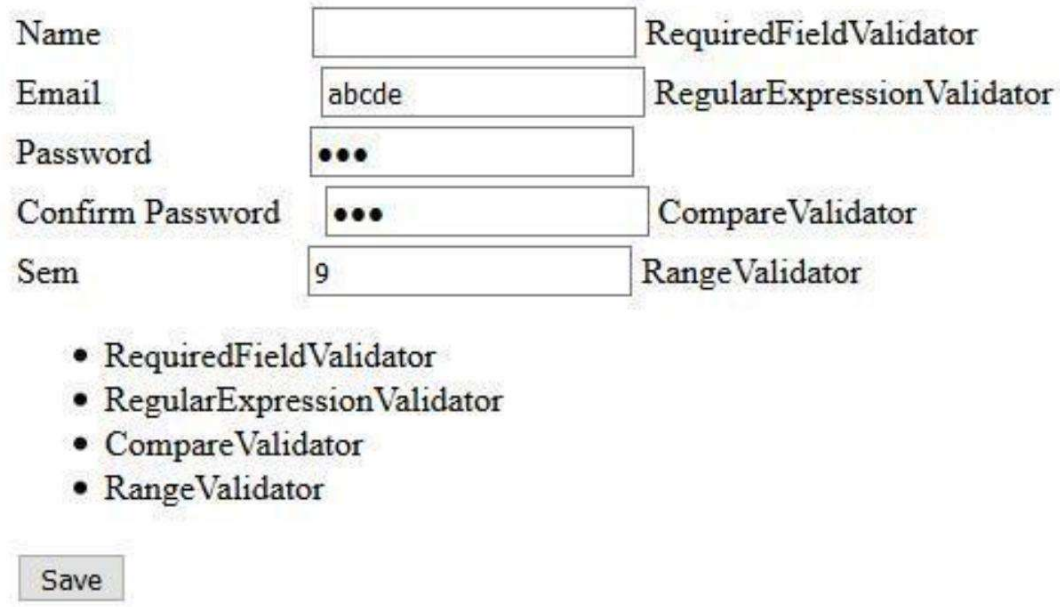
Program 1

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication1.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 style="height: 19px">

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

<p>

        Name:<asp:TextBox ID="txtName" runat="server" ForeColor="Red"

            ToolTip="Enter Your Name"></asp:TextBox>

<asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server"

            ControlToValidate="txtName" Display="Dynamic" ErrorMessage="Enter Your
Name"

            ForeColor="Red" ToolTip="Enter Your Name">*</asp:RequiredFieldValidator>

</p>

<p>

        Email:<asp:TextBox ID="txtEmail" runat="server" ForeColor="Red"

            ToolTip="Enter Your Email"></asp:TextBox>

<asp:RegularExpressionValidator ID="RegularExpressionValidator3" runat="server"

            ControlToValidate="txtEmail" Display="Dynamic" ErrorMessage="Enter Valid
Email"
```

```
            ForeColor="Red" ToolTip="Enter Your Email"

            ValidationExpression="\w+([-+.']\w+)*@\w+([-.]\w+)*\.\w+([-
.]\w+)*">*</asp:RegularExpressionValidator>

</p>

<p>

        Password:<asp:TextBox ID="txtPass" runat="server"></asp:TextBox>

    Confirm Password:<asp:TextBox ID="txtConfirm"
runat="server"></asp:TextBox>

<asp:CompareValidator ID="CompareValidator1" runat="server"

            ControlToCompare="txtPass" ControlToValidate="txtConfirm"

            ErrorMessage="Enter Same Password" ForeColor="Red"

            ToolTip="Enter Same Password">*</asp:CompareValidator>

</p>

<p>

        Semester:<asp:TextBox ID="txtSem" runat="server"></asp:TextBox>

<asp:RangeValidator ID="RangeValidator1" runat="server"

            ControlToValidate="txtSem" ErrorMessage="Enter Semester between 1 to 8"

            ForeColor="Red" MaximumValue="8" MinimumValue="1"

            ToolTip="Enter Valid Semester" Type="Integer">*</asp:RangeValidator>

</p>

<p>

        PhoneNo:<asp:TextBox ID="txtPhone" runat="server"></asp:TextBox>

<asp:RegularExpressionValidator ID="RegularExpressionValidator4" runat="server"

            ControlToValidate="txtPhone" ErrorMessage="Enter Valid PhoneNo"
ForeColor="Red"

            ToolTip=" Enter Valid Phone Number" ValidationExpression="[0-
9]{10}">*</asp:RegularExpressionValidator>

</p>

<asp:Button ID="btnSave" runat="server" Text="Save" />
```

```
<asp:ValidationSummary ID="ValidationSummary1" runat="server" />
</form>
</body>
</html>
```

Output:



Practical 8

AIM: Master Page

Program 1

Webform2.cs:

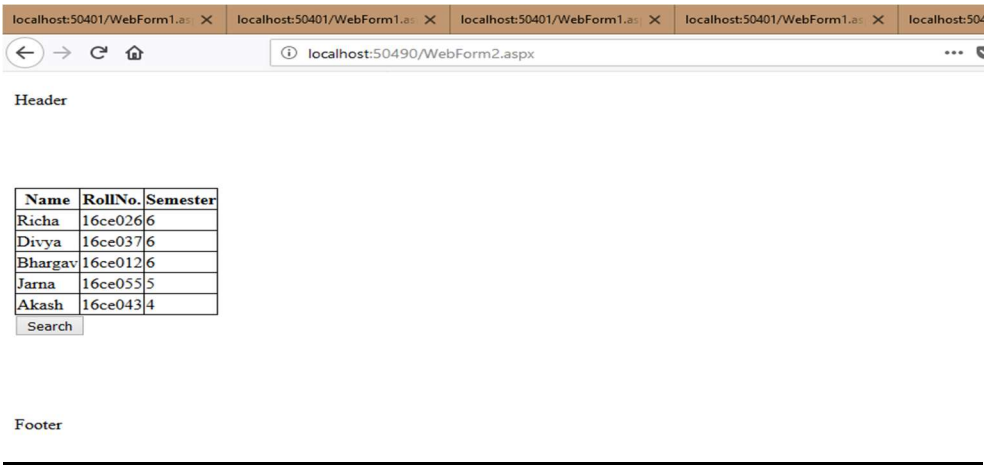
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data.SqlClient;


namespace WebApplication5
{
    public partial class WebForm2 : System.Web.UI.Page
    {
        protected void Page_Init(object sender, EventArgs e)
        {
            ((Site1)Master).BtnSearch.Click += new EventHandler(btnSearch_Click);
        }


        protected void btnSearch_Click(object sender, EventArgs e)
        {
            GetData();
        }
        protected void Page_Load(object sender, EventArgs e)
```

```
        {


        }
        void GetData()
        {
            string source = @"Data
Source=.\SQLEXPRESS;AttachDbFilename=C:\Users\cecomp1\Documents\emp.mdf;Integrated
Security=True;Connect Timeout=30;User Instance=True";
            string select ="select * from tblStudent";
            SqlConnection conn = new SqlConnection(source);
            SqlCommand cmd = new SqlCommand(select, conn);
            conn.Open();
            SqlDataReader reader = cmd.ExecuteReader();
            grdEmp.DataSource = reader;
            grdEmp.DataBind();
            conn.Close();


        }


    }
}


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

Webform1.cs

```
namespace WebApplication5
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void btnHeader_Click(object sender, EventArgs e)
        {
            ((Site1)Master).LblHeader.Text = txtHeader.Text;
        }
    }
}
```

Output:



Practical 9

AIM: Web Services

Program 1

Create web service & consume it

WebService1.asmx.cs:

```
using System;

 using System.Collections.Generic;

 using System.Linq;

using System.Web;

 using System.Web.Services;


namespace Service {

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


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


[WebMethod]

public string HelloWorld()

 {

 return "Hello World";

 }

[WebMethod]

public int Add(int a, int b)

 {
```

```
return a + b;
 }
[WebMethod]
public int Sub(int a, int b)
 {
return a - b;
 }
 [WebMethod]
 public int Mul(int a, int b)
 {
return a * b;
}
[WebMethod]
public int Div(int a, int b)
 {
return a / b;
 }
}
}
```

WebForm1.aspx:

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


<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">


<html xmlns="http://www.w3.org/1999/xhtml">
 <head runat="server">
```

```
 <title></title>

</head>

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

<div>



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

</asp:RequiredFieldValidator>

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

</asp:RegularExpressionValidator>

<br />

<asp:TextBox ID="txtB" runat="server"></asp:TextBox> <asp:RequiredFieldValidator
ID="RequiredFieldValidator2" runat="server" ControlToValidate="txtB"
ErrorMessage="RequiredFieldValidator">

</asp:RequiredFieldValidator> <asp:RegularExpressionValidator
ID="RegularExpressionValidator1" runat="server" ControlToValidate="txtB"
ErrorMessage="RegularExpressionValidator" ValidationExpression="^[0-
9]+"></asp:RegularExpressionValidator>

 <br />

<asp:Button ID="btnadd" runat="server" onclick="btnadd_Click" Text="Add" />

 <asp:Button ID="btnsub" runat="server" onclick="btnsub_Click" Text="Sub" />

 <asp:Button ID="btnmul" runat="server" onclick="btnmul_Click" Text="Mul" />

<asp:Button ID="btndiv" runat="server" onclick="btndiv_Click" Text="Div" /> <br />

 <asp:Label ID="lblresult" runat="server" Text="Result">

</asp:Label>



</div>

 </form>
```

```
</body>

</html>
```

WebForm1.aspx.cs:

```
using System;

 using System.Collections.Generic;

 using System.Linq;

 using System.Web;

 using System.Web.UI;

 using System.Web.UI.WebControls;


 namespace WebService {

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

 protected void Page_Load(object sender, EventArgs e) {

 }

 protected void btnadd_Click(object sender, EventArgs e)

 {

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

 }

 protected void btnsub_Click(object sender, EventArgs e)

{

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

}

protected void btnmul_Click(object sender, EventArgs e) {
```

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

 }

 protected void btndiv_Click(object sender, EventArgs e) {

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

 }

}

}
```

Output: