PRACTICAL - 1

AIM: Write the following programs in C#.NET :-

a) Write a program to print "Hello World"

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

namespace ConsoleApplication2
{
   class Program
   {
      static void Main(string[] args)
      {
         Console.WriteLine("hello world");
         Console.ReadKey();
      }
   }
}
```

OUTPUT:

hello world

b) Write a program to reverse a number

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

namespace ConsoleApplication2
{
   class Program
   {
      static void Main(string[] args)
```

```
        {
            Console.WriteLine("Enter a Number");
            int numb = int.Parse(Console.ReadLine());
            int reverse = 0;
            while (numb > 0)
            {
                int rem = numb % 10;
                reverse = (reverse * 10) + rem;
                numb = numb / 10;

            }
            Console.WriteLine("Reverse number={0}", reverse);
            Console.ReadLine();
        }
    }
}
```

OUTPUT:

Enter a Number

1234

Reverse number=4321

c) Write a program to find the greatest value of the three values

```
class Program
{
    static void Main(string[] args)
    {
        int n1, n2, n3;
        Console.WriteLine("Enter Three no:");
        n1 = Convert.ToInt32(Console.ReadLine());
        n2 = Convert.ToInt32(Console.ReadLine());
        n3 = Convert.ToInt32(Console.ReadLine());
        if (n1 > n2)
            if (n1 > n3)
            {
                Console.WriteLine("The Greatest Of Three numbers are:" + n1);
            }
            else
            {
                Console.WriteLine("The Greatest Of Three numbers are:" + n3);
            }
```

```
            else
                if (n2 > n3)
            {
               Console.WriteLine("The Greatest Of Three numbers are:" + n2);
            }
            else
            {
               Console.WriteLine("The Greatest Of Three numbers are:" + n3);
               Console.ReadKey();
            }
        }
    }
```

OUTPUT:

Enter Three no:

10

20

30

The Greatest Of Three numbers are:30

d) Write a program to sort an integer array of 10 elements in ascending

```
using System;

class Program
{
   static void Main()
   {

        int[] values = { 4, 7, 2, 0 };
        Array.Sort(values);
        foreach (int value in values)
        {
           Console.Write(value);
           Console.Write(' ');
        }
        Console.WriteLine();
   }
}
```

OUTPUT:

0 2 4 7

PRACTICAL - 2

a) 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 ConsoleApplication2
{
   class Program
   {
      static void Main(string[] args)
      {

         Console.WriteLine("Enter Your Name:");
         String name = Console.ReadLine();
         Console.WriteLine("Enter Your Country:");
         String country = Console.ReadLine();
         Console.WriteLine("Hello " +name + " From " + country + "!");
         Console.ReadKey();
      }
   }
}
```

OUTPUT:

Enter Your Name:

.NET

Enter Your Country:

INDIA

Hello .NET From INDIA!

a) Write a program in which accept two argument as parameter from the user and returns four output value as add, subtract, multiplication and division.

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

namespace ConsoleApplication2
{
   class Program
   {
      public void Value(int num1, int num2)
      {
         Console.WriteLine("Addition is " + (num1 + num2));
         Console.WriteLine("Subtraction is " + (num1 - num2));
         Console.WriteLine("Multiplication is " + (num1 * num2));
         Console.WriteLine("Division is " + (num1 / num2));
         Console.ReadKey();
      }
      static void Main(string[] args)
      {
         Program obj = new Program();
         obj.Value(10, 20);
      }
   }
}
```

OUTPUT:

Addition is 30

Subtraction is -10

Multiplication is 200

Division is 0

PRACTICAL - 3

AIM:Create console applications to implement following C# concepts.

a) Constructor & Copy Constructor.

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

namespace ConsoleApplication2
{
   class Program
   {
      public Program()
      {
         Console.WriteLine("Default Constructor.");
         Console.WriteLine("Invoke at the time of object creation.");
      }
      public Program(String str)
      {
         Console.WriteLine("Parameterized constructor");
         Console.WriteLine("Hello " + str);
      }
      static void Main(string[] args)
      {
         Program obj = new Program();
         Program obj1 = new Program("mrindia");
         Console.ReadKey();
      }
   }
}
```

OUTPUT:

Default Constructor.
Invoke at the time of object creation.
Parameterized constructor
Hello mrindia

Copy Constructor.

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

namespace ConsoleApplication2
{
   class Program
   {
      public String str1, str2;
      public Program(String x, String y)
      {
         str1 = x;
         str2 = y;
      }
      public Program(Program obj)
      {
         str1 = obj.str1;
         str2 = obj.str2;
      }
      static void Main(string[] args)
      {
         Program obj = new Program("welcome", " C# .net");
         Program obj1 = new Program(obj);
         Console.WriteLine(obj1.str1 + "To" + obj.str2);
         Console.ReadKey();
      }
   }
}
```

OUTPUT:

welcomeTo C# .net

b) Destructor

```
using System;
```

```
class A
{
 public A()
 {
  Console.WriteLine("Creating A");
 }
 ~A()
 {
  Console.WriteLine("Destroying A");
 }
}

class B:A
{
 public B()
 {
  Console.WriteLine("Creating B");
 }
 ~B()
 {
  Console.WriteLine("Destroying B");
 }

}
class C:B
{
 public C()
 {
  Console.WriteLine("Creating C");
 }

 ~C()
 {
  Console.WriteLine("Destroying C");
 }
}
class App
{
 public static void Main()
 {
  C c=new C();
  Console.WriteLine("Object Created ");
  Console.WriteLine("Press enter to Destroy it");
  Console.ReadLine();
```

```
 c=null;
 //GC.Collect();
 Console.Read();
}

}
```

OUTPUT:

Creating A
Creating B
Creating C
Object Created
Press enter to Destroy it
Destroying C
Destroying B
Destroying A

c) Method Overloading

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

namespace ConsoleApplication2
{
   class Program
   {
      public void add(int a, int b)
      {
         Console.WriteLine("This is method contain two parameter.");
         Console.WriteLine(a + b);
      }
      public void add(int a, int b,int c)
      {
         Console.WriteLine("This is method contain Three parameter.");
         Console.WriteLine(a + b+c);
      }
```

```
        public static void Main()
        {
            Console.WriteLine("Example of method overloading");
            Program obj = new Program();
            obj.add(10, 20);
            obj.add(10, 20, 30);
            Console.ReadKey();
        }
    }
}
```

OUTPUT:

Example of method overloading
This is method contain two parameter.
30
This is method contain Three parameter.
60

d) Properties

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

namespace ConsoleApplication2
{
    class Student
    {
        private string code = "N.A";
        private string name = "not known";
        private int age = 0;

        public string Code
        {
            get
            {
                return code;
            }
```

```
        set
        {
            code = value;
        }
    }

public string Name
    {
        get
        {
            return name;
        }
        set
        {
            name = value;
        }
    }
    public int Age
    {
        get
        {
            return age;
        }
        set
        {
            age = value;
        }
    }
    public override string ToString()
    {
        return "Code = " + Code + ", Name = " + Name + ", Age = " + Age;
    }
}

 class ExampleDemo
{
    public static void Main()
      Student s = new Student();
        s.Code = "001";
        s.Name = "Zara";
        s.Age = 9;
        Console.WriteLine("Student Info: {0}", s);
```

```
            s.Age += 1;
            Console.WriteLine("Student Info: {0}", s);
            Console.ReadKey();
        }
    }
}
```

OUTPUT:

Student Info: Code = 001, Name = Zara, Age = 9
Student Info: Code = 001, Name = Zara, Age = 10

e) Inheritance

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

namespace ConsoleApplication2
{
    public class variable
    {

        public int a=10;
        public int b=20;
        public int c;


    }
    public class method : variable
    {
        public void add()
        {
            c = a + b;
            Console.WriteLine(c);
        }
    }
```

```
class ExampleDemo
{
   public static void Main()
   {
      method obj = new method();
      obj.add();
      Console.ReadKey();
   }
}
}
```

OUTPUT:

30

f) **Exception Handling**

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


namespace ConsoleApplication2
{
   public class program
   {
     public program()
      {
         try
         {
            int a = 10;
            int b = 0;
            int result = a / b;
         }
         catch (DivideByZeroException e)
         {
            Console.WriteLine("you Can't divide by zero");
         }
      }

   }
```

```
    class ExampleDemo
    {
        public static void Main()
        {
            program obj = new program();
            Console.ReadKey();
        }
    }
}
```

OUTPUT:

you Can't divide by zero

g) Delegates

```
using System;
using System.Text;
using System.Threading.Tasks;
delegate int NumberChanger(int n);
namespace ConsoleApplication2
{
    public class program
    {
        static int num = 10;
        public static int AddNum(int p)
        {
            num += p;
            return num;
        }
        public static int MultNum(int q)
        {
            num *= q;
            return num;
        }
        public static int getNum()
        {           return num;       }

public static void Main()

        {

            NumberChanger nc1 = new NumberChanger(AddNum);
```

```
            NumberChanger nc2 = new NumberChanger(MultNum);

            nc1(25);
            Console.WriteLine("Value of Num: {0}", getNum());
            nc2(5);
            Console.WriteLine("Value of Num: {0}", getNum());
            Console.ReadKey();
        }
}

}
```

OUTPUT:

Value of Num: 35

Value of Num: 175

h) Indexer

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
namespace ConsoleApplication2
{
        class IndexedNames
    {
        private string[] namelist = new string[size];
        static public int size = 10;
        public IndexedNames()
        {
           for (int i = 0; i < size; i++)
              namelist[i] = "N. A.";
        }

        public string this[int index]
        {
           get
           {
              string tmp;

              if (index >= 0 && index <= size - 1)
```

```
            {
                tmp = namelist[index];
            }
            else
            {
                tmp = "";
            }

            return (tmp);
        }
        set
        {
            if (index >= 0 && index <= size - 1)
            {
                namelist[index] = value;
            }
        }
    }

    static void Main(string[] args)
    {
        IndexedNames names = new IndexedNames();
        names[0] = "Zara";
        names[1] = "Riz";
        names[2] = "Nuha";
        names[3] = "Asif";
        names[4] = "Davinder";
        names[5] = "Sunil";
        names[6] = "Rubic";
        for (int i = 0; i < IndexedNames.size; i++)
        {
            Console.WriteLine(names[i]);
        }

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

OUTPUT:

Zara
Riz
Nuha

Asif
Davinder
Sunil
Rubic
N. A.
N. A.
N. A.

i) Event

```
using System;
namespace SimpleEvent
{
   using System;

   public class EventTest
   {
      private int value;
      public delegate void NumManipulationHandler();
      public event NumManipulationHandler ChangeNum;
      protected virtual void OnNumChanged()
      {
         if (ChangeNum != null)
         {
            ChangeNum();
         }
         else
         {
            Console.WriteLine("Event fired!");
         }
      }

      public EventTest(int n)
      {
         SetValue(n);
      }

      public void SetValue(int n)
```

```
        {
            if (value != n)
            {
                value = n;
                OnNumChanged();
            }
        }
    }

    public class MainClass
    {
        public static void Main()
        {
            EventTest e = new EventTest(5);
            e.SetValue(7);
            e.SetValue(11);
            Console.ReadKey();
        }
    }
}
```

OUTPUT:

Event fired!
Event fired!
Event fired!

j) Reflection API

```
using System;

[AttributeUsage(AttributeTargets.All)]
public class HelpAttribute : System.Attribute
{
    public readonly string Url;

    public string Topic   // Topic is a named parameter
    {
        get
        {
            return topic;
```

```
        }
        set
        {
            topic = value;
        }
    }

    public HelpAttribute(string url)   // url is a positional parameter
    {
        this.Url = url;
    }
    private string topic;
}

[HelpAttribute("Information on the class MyClass")]
class MyClass
{
}
namespace AttributeAppl
{
    class Program
    {
        static void Main(string[] args)
        {
            System.Reflection.MemberInfo info = typeof(MyClass);
            object[] attributes = info.GetCustomAttributes(true);
            for (int i = 0; i < attributes.Length; i++)
            {
                System.Console.WriteLine(attributes[i]);
            }

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

OUTPUT:

ConsoleApplication3.HelpAttribute

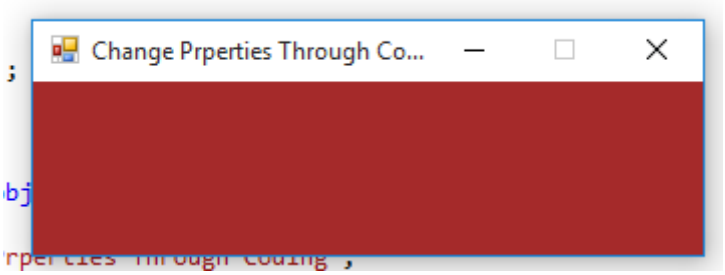
PRACTICAL - 4

AIM:Write the following programs in C#.NET :-

a) **Create a window application for basic window form controls that will show the basic property and methods of all that controls.**

```
using System;
using System.Drawing;
using System.Windows.Forms;

namespace WindowsFormsApplication4
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void Form1_Load(object sender, EventArgs e)
      {
         this.Text = "Change Prperties Through Coding";
         this.BackColor = Color.Brown;
         this.Size = new Size(350, 125);
         this.Location = new Point(300, 300);
         this.MaximizeBox = false;
      }
   }
}
```

OUTPUT:



b) **Create a calculator using button, label, textbox control in .NET**

```
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;

namespace WindowsFormsApplication9
{
   public partial class Form1 : Form
   {
      string opr;
      double oparand1, oparand2, result;
      //  double SqrRoot;



      public Form1()
      {
         InitializeComponent();
      }
      private void btn1_Click(object sender, EventArgs e)
      {
         display.Text = display.Text + "1";
      }
      private void btn2_Click(object sender, EventArgs e)
      {
         display.Text = display.Text + "2";
      }

      private void btn3_Click(object sender, EventArgs e)
      {
         display.Text = display.Text + "3";
      }

      private void btn4_Click(object sender, EventArgs e)
      {
         display.Text = display.Text + "4";
      }
```

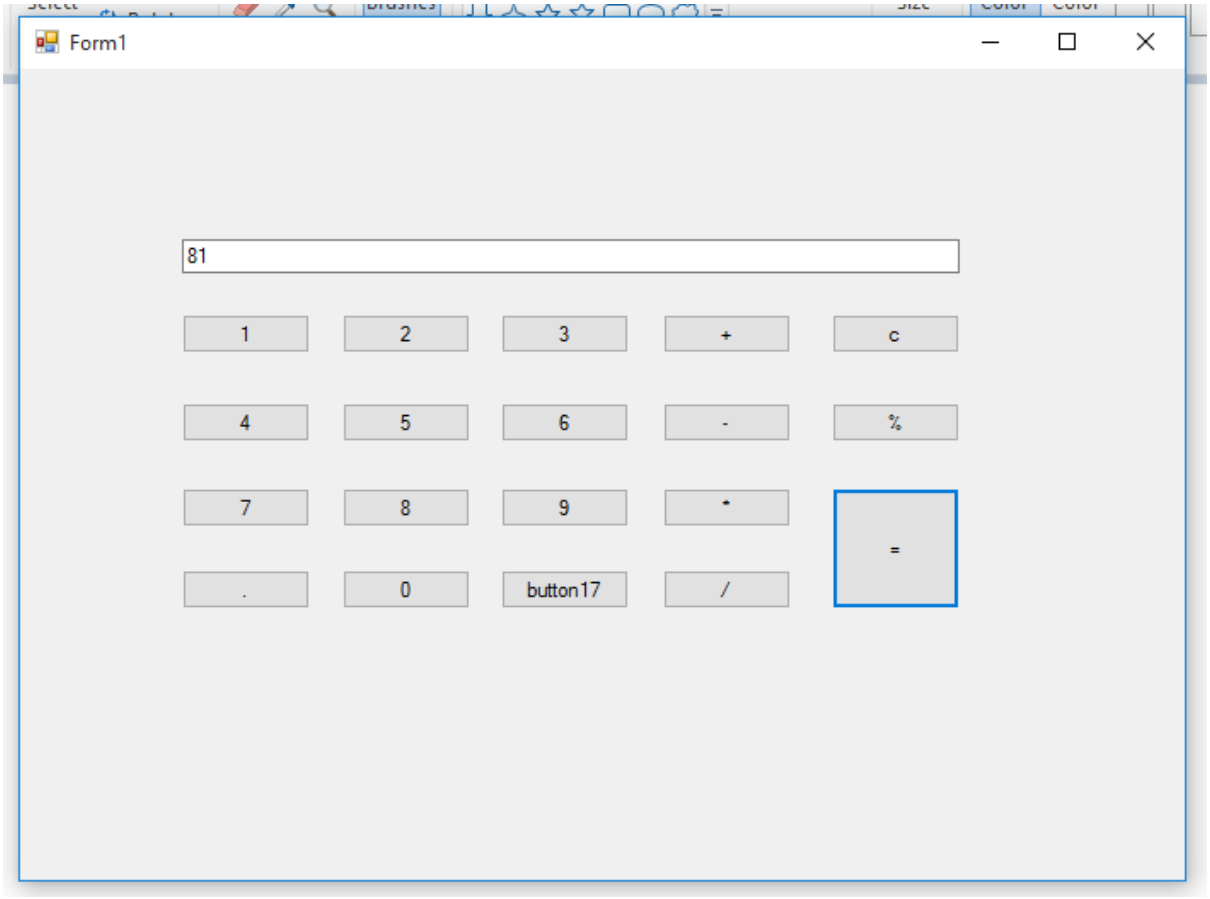
```
private void btn5_Click(object sender, EventArgs e)
{
   display.Text = display.Text + "5";       }

private void btn6_Click(object sender, EventArgs e)
{
   display.Text = display.Text + "6";
}

private void btn7_Click(object sender, EventArgs e)
{
   display.Text = display.Text + "7";
}

private void btn8_Click(object sender, EventArgs e)
{
   display.Text = display.Text + "8";
}

private void btn9_Click(object sender, EventArgs e)
{
   display.Text = display.Text + "9";
}

private void btn0_Click(object sender, EventArgs e)
{
   display.Text = display.Text + "0";
}

private void btnc_Click(object sender, EventArgs e)
{
   display.Clear();
}

private void btnminus_Click(object sender, EventArgs e)
{
   oparand1 = Convert.ToDouble(display.Text);
   opr = "-";
   display.Clear();       }

private void btnmul_Click(object sender, EventArgs e)
{
   oparand1 = Convert.ToDouble(display.Text);
   opr = "*";
```

```
            display.Clear();
        }

        private void btndiv_Click(object sender, EventArgs e)
        {
            oparand1 = Convert.ToDouble(display.Text);
            opr = "/";
            display.Clear();
        }

        private void btnprod_Click(object sender, EventArgs e)
        {
            oparand1 = Convert.ToDouble(display.Text);
            opr = "%";

    display.Clear();
        }

        private void btndot_Click(object sender, EventArgs e)
        {
            if (display.Text.Contains("."))
            {
                display.Text = display.Text;
            }
            else
            {
                display.Text = display.Text + ".";
            }
        }

        private void btnplusorminus_Click(object sender, EventArgs e)
        {
            if (display.Text.Contains("-"))
            {
                display.Text = display.Text.Remove(0, 1);
            }
            else
            {
                display.Text = "-" + display.Text;
            }       }

        private void btnequals_Click(object sender, EventArgs e)
        {
            oparand2 = Convert.ToDouble(display.Text);
```

```
    switch (opr)
    {
        case "+":
            result = oparand1 + oparand2;
            display.Text = Convert.ToString(result);
            break;
        case "-":
            result = oparand1 - oparand2;
            display.Text = Convert.ToString(result);
            break;
        case "*":
            result = oparand1 * oparand2;
            display.Text = Convert.ToString(result);
            break;
        case "/":
            if (oparand2 == 0)
            {
                display.Text = "0.0";
                break;
            }
            else
            {
                result = oparand1 / oparand2;
                display.Text = Convert.ToString(result);
                break;
            }
        case "%":
            result = oparand1 % oparand2;
            display.Text = Convert.ToString(result);
            break;
    }           }

private void btnplus_Click(object sender, EventArgs e)
{
    oparand1 = Convert.ToDouble(display.Text);
    opr = "+";

    display.Clear();        }



private void Form1_Load(object sender, EventArgs e)
{
```

```
        }
    }
}
```

OUTPUT:



PRACTICAL - 5

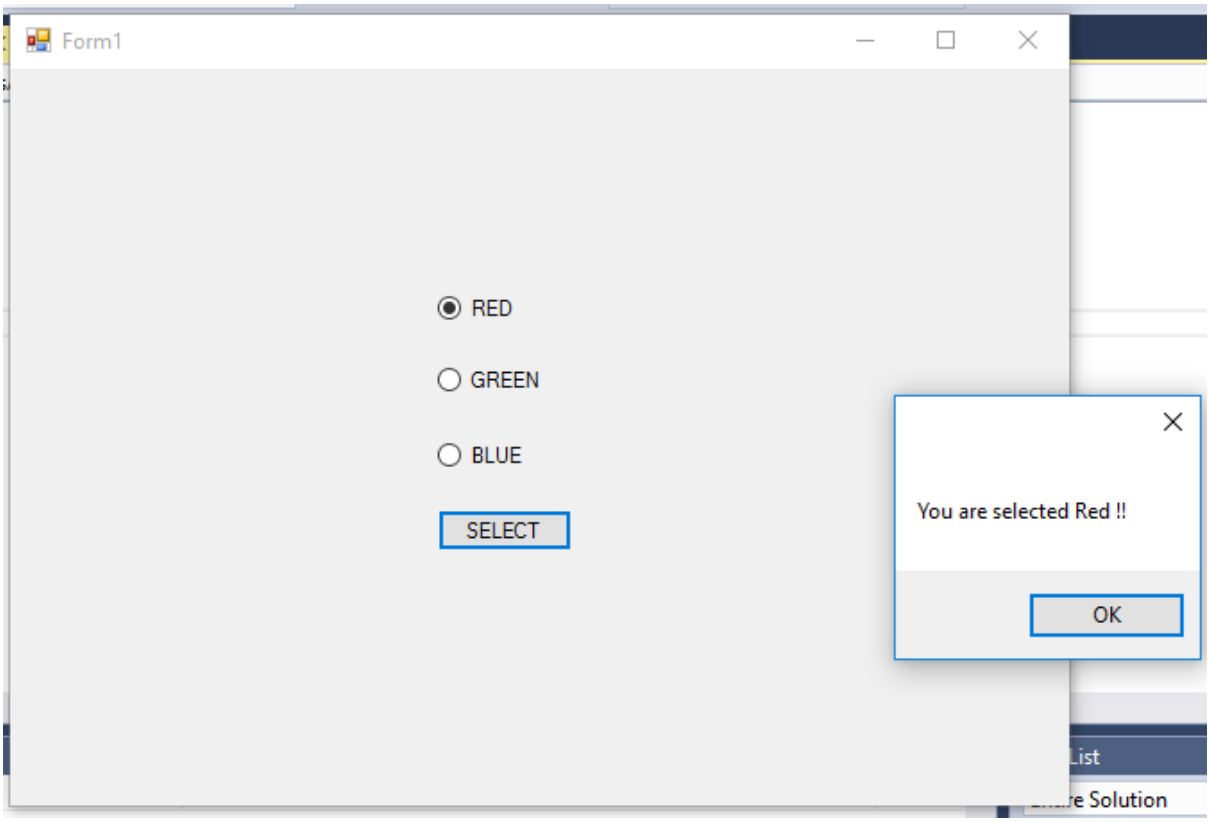
a) Write a program to demonstrate use of radio button, checkbox, list box, combo box and list view

Radio Button

```
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;

namespace WindowsFormsApplication7
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void Form1_Load(object sender, EventArgs e)
      {
         radioButton1.Checked = true;
      }

      private void button1_Click(object sender, EventArgs e)
      {
         if (radioButton1.Checked == true)
         {
            MessageBox.Show("You are selected Red !! ");
            return;
         }
         else if (radioButton2.Checked == true)
         {
            MessageBox.Show("You are selected Blue !! ");
            return;
         }
         else
         {
            MessageBox.Show("You are selected Green !! ");
```

```
                return;
            }
        }
    }
}
```

OUTPUT:



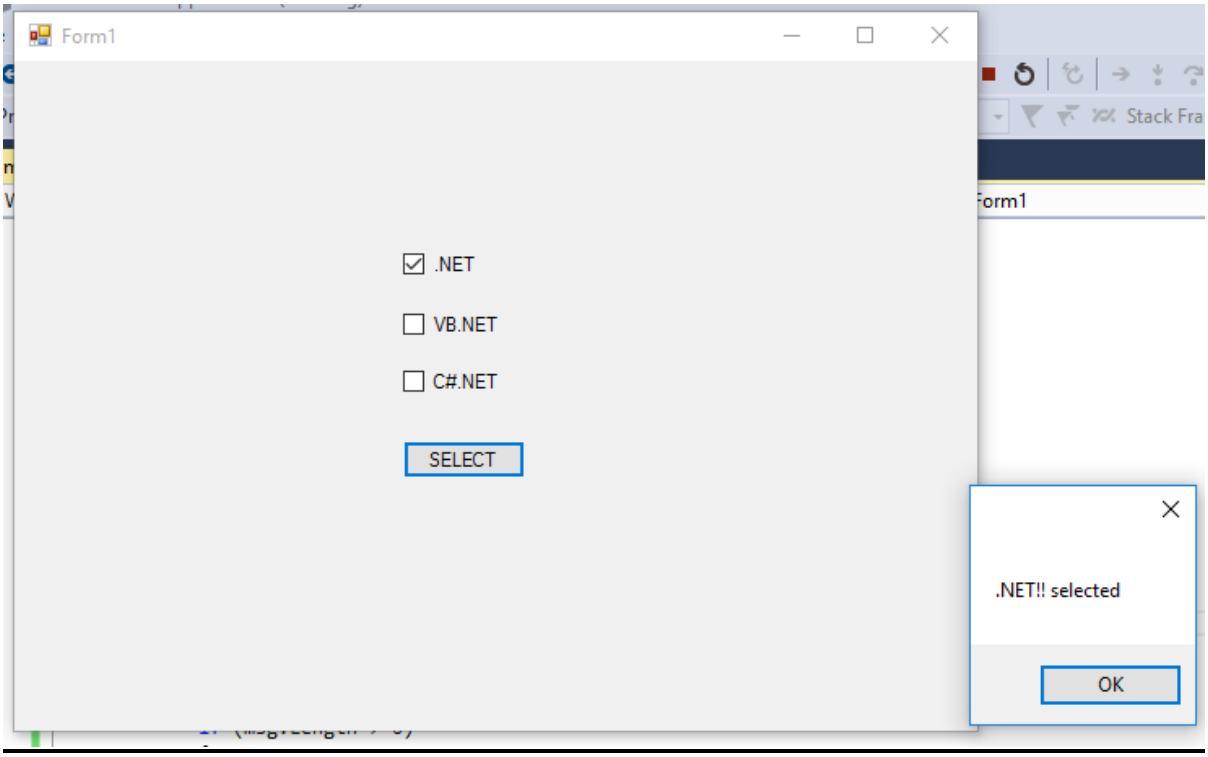
CheckBox Control

```
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;

namespace WindowsFormsApplication7
```

```
{
    public partial class Form1 : Form
    {
        public Form1()
        {
            InitializeComponent();
        }

        private void Form1_Load(object sender, EventArgs e)
        {

        }

        private void button1_Click(object sender, EventArgs e)
        {
            string msg = "";

            if (checkBox1.Checked == true)
            {
                msg = " .NET!!";
            }

            if (checkBox2.Checked == true)
            {
                msg = msg + "   VB.NET !!";
            }

            if (checkBox3.Checked == true)
            {
                msg = msg + "    C#NET !!";
            }


            if (msg.Length > 0)
            {
                MessageBox.Show(msg + " selected ");
            }
            else
            {
                MessageBox.Show("No checkbox selected");
            }

            checkBox1.ThreeState = true;
        }
```

```
    }
}
```

OUTPUT:

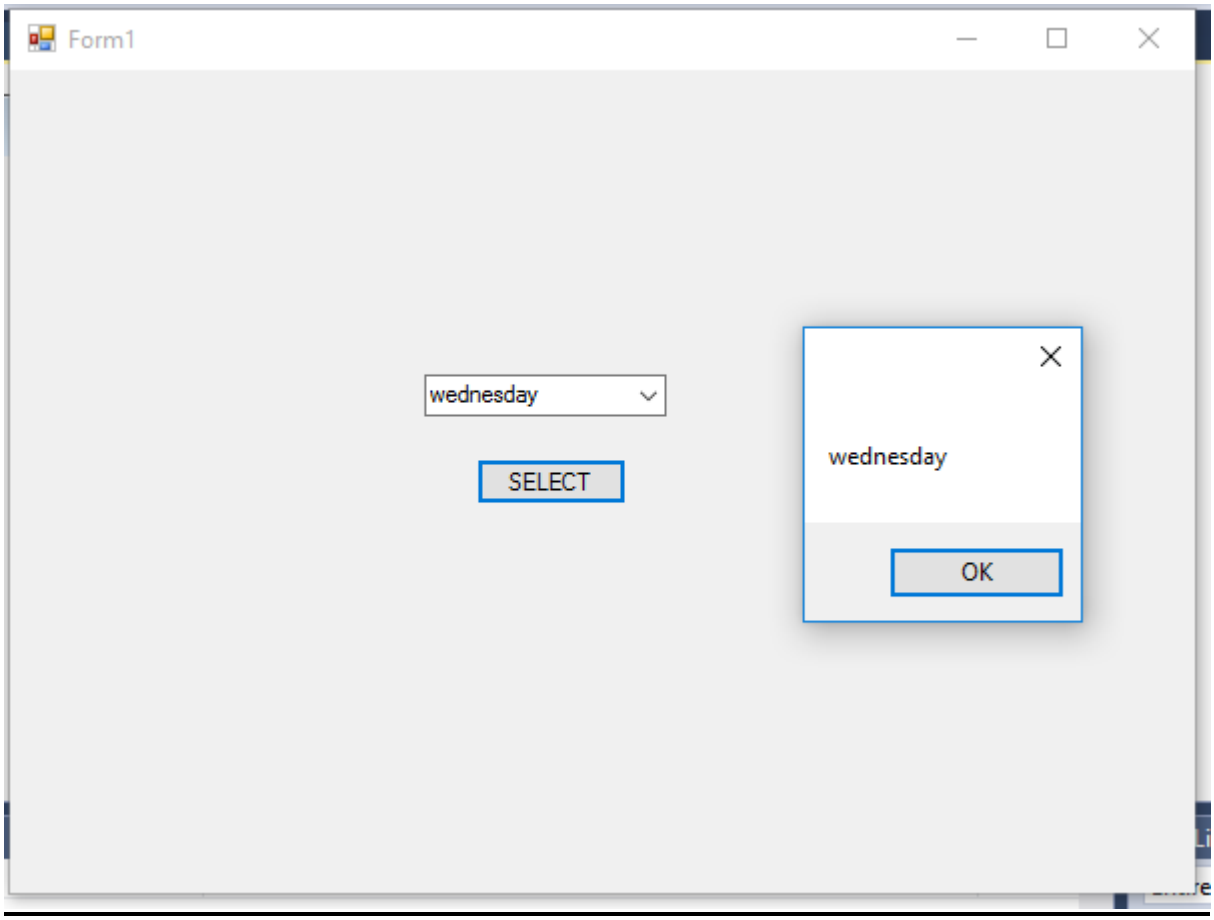


ComboBox Control

```
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;

namespace WindowsFormsApplication7
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void Form1_Load(object sender, EventArgs e)
      {
         comboBox1.Items.Add("Sunday");
         comboBox1.Items.Add("Monday");
         comboBox1.Items.Add("Tuesday");
         comboBox1.Items.Add("wednesday");
         comboBox1.Items.Add("Thursday");
         comboBox1.Items.Add("Friday");
         comboBox1.Items.Add("Saturday");
         comboBox1.SelectedIndex = comboBox1.FindStringExact("Sunday");

      }

      private void button1_Click(object sender, EventArgs e)
      {
         string var;
         var = comboBox1.Text;
         MessageBox.Show(var);
      }
   }
}
```

OUTPUT:



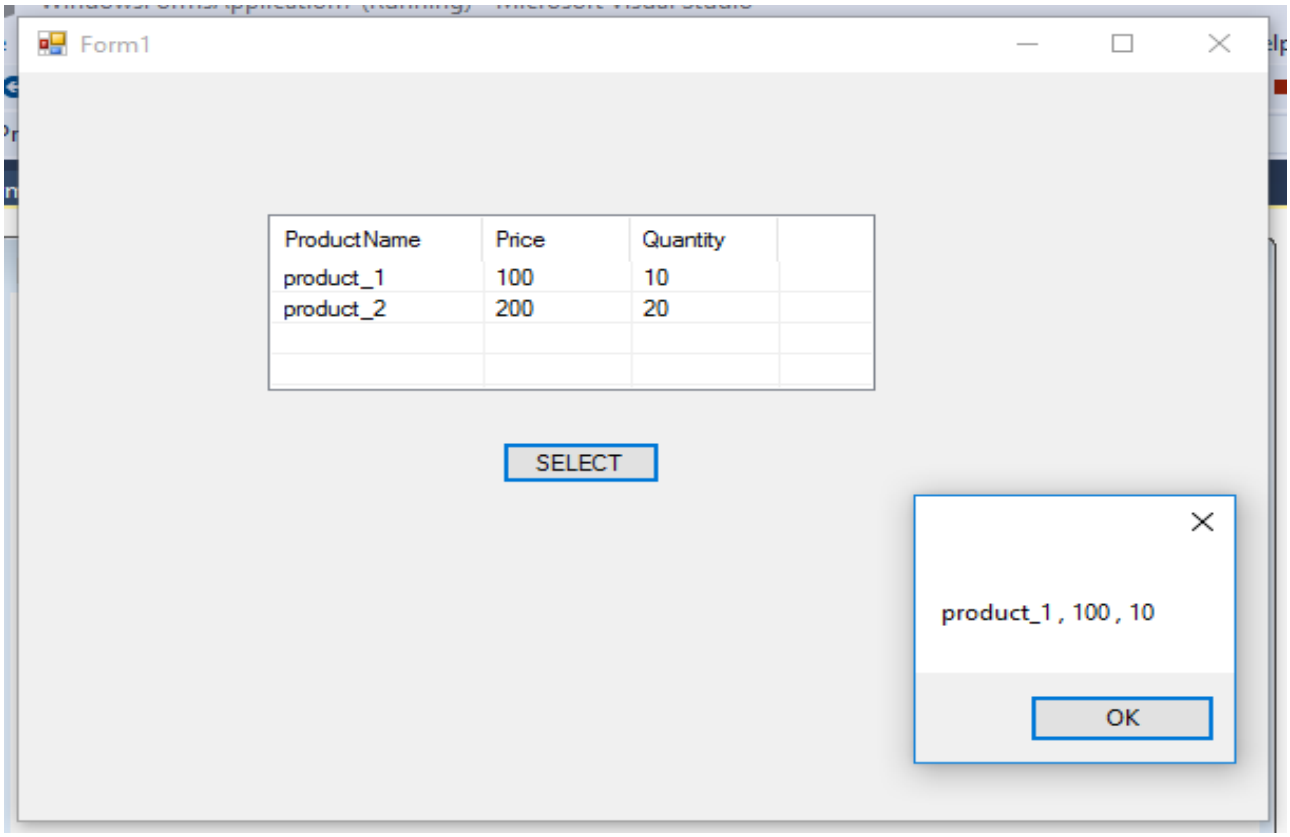
ListView Control

```
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;

namespace WindowsFormsApplication7
{
    public partial class Form1 : Form
    {
```

```
public Form1()
{
   InitializeComponent();
}

private void Form1_Load(object sender, EventArgs e)
{
   listView1.View = View.Details;
   listView1.GridLines = true;
   listView1.FullRowSelect = true;

   //Add column header
   listView1.Columns.Add("ProductName", 100);
   listView1.Columns.Add("Price", 70);
   listView1.Columns.Add("Quantity", 70);

   //Add items in the listview
   string[] arr = new string[4];
   ListViewItem itm;

   //Add first item
   arr[0] = "product_1";
   arr[1] = "100";
   arr[2] = "10";
   itm = new ListViewItem(arr);
   listView1.Items.Add(itm);

   //Add second item
   arr[0] = "product_2";
   arr[1] = "200";
   arr[2] = "20";
   itm = new ListViewItem(arr);
   listView1.Items.Add(itm);

}

private void button1_Click(object sender, EventArgs e)
{
   string productName = null;
   string price = null;
   string quantity = null;

   productName = listView1.SelectedItems[0].SubItems[0].Text;
   price = listView1.SelectedItems[0].SubItems[1].Text;
```

```
            quantity = listView1.SelectedItems[0].SubItems[2].Text;

            MessageBox.Show(productName + " , " + price + " , " + quantity);
        }
    }
}
```

OUTPUT:



b) Write a program to demonstrate use of inheritance of a form in another form

form1.cs

```
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;

namespace WindowsFormsApplication10
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void button1_Click(object sender, EventArgs e)
      {
         MessageBox.Show("base form is show");
      }

      private void Form1_Load(object sender, EventArgs e)
      {

      }
   }
}
```

form2.cs

```
using System;
using System.Collections.Generic;
using System.ComponentModel;
using System.Data;
using System.Drawing;
using System.Text;
using System.Windows.Forms;

namespace WindowsFormsApplication10
{
   public partial class Form2 : WindowsFormsApplication10.Form1
   {
      public Form2()
      {
         InitializeComponent();
      }
```

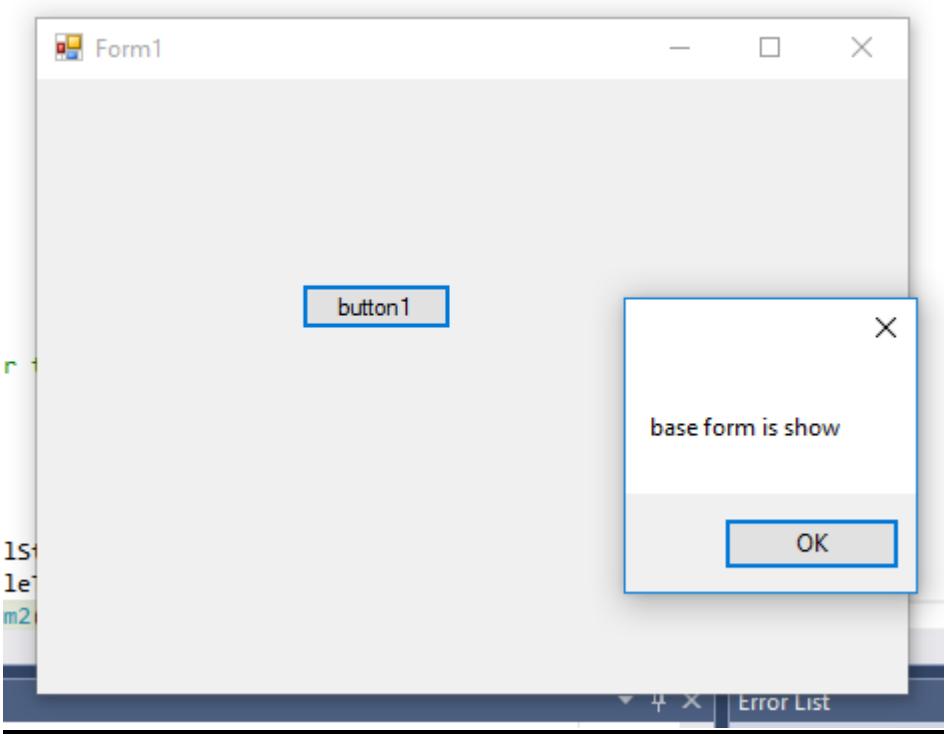
```
        private void button1_Click_1(object sender, EventArgs e)
        {
            MessageBox.Show("subform form is show");
        }
    }
}
```

program.cs

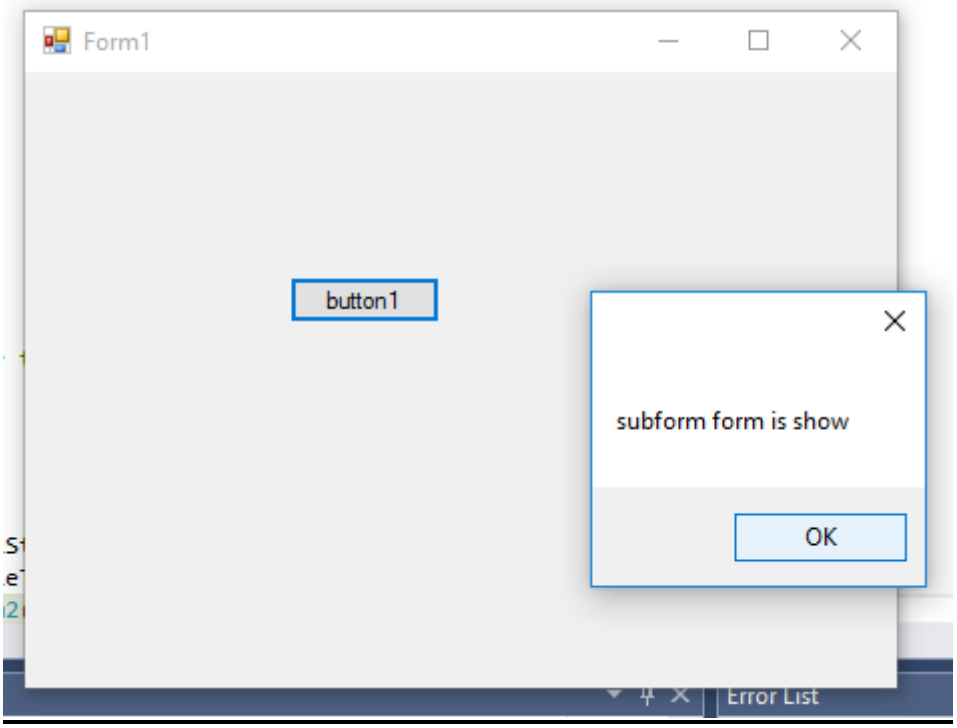
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Threading.Tasks;
using System.Windows.Forms;

namespace WindowsFormsApplication10
{
    static class Program
    {
        /// <summary>
        /// The main entry point for the application.
        /// </summary>
        [STAThread]
        static void Main()
        {
            Application.EnableVisualStyles();
            Application.SetCompatibleTextRenderingDefault(false);
           Application.Run(new Form2());
        }
    }
}
```

OUTPUT:

BASE FORM



DERIVED FORM



c) Write a program to demonstrate use of MDI form

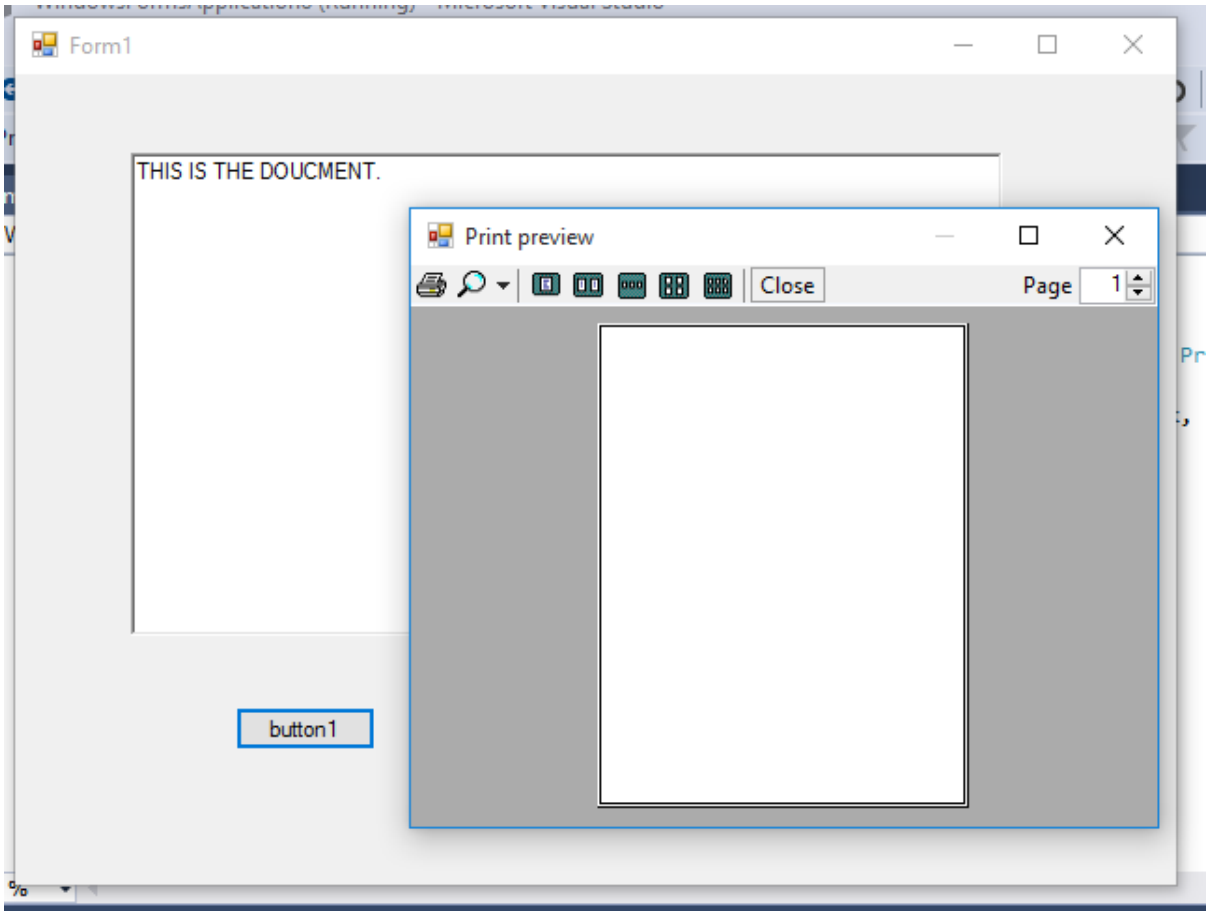
```
using System;
using System.Drawing;
using System.Windows.Forms;

namespace WindowsFormsApplication1
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void menu1ToolStripMenuItem_Click(object sender, EventArgs e)
      {
         MessageBox.Show("You are selected MenuItem_1");
      }
   }
}
```

d) Write a program to demonstrate use of print dialog (print document, print preview control and print setup)

```
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;

namespace WindowsFormsApplication8
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }
      private void printDocument1_PrintPage(object sender,
System.Drawing.Printing.PrintPageEventArgs e)
      {
         e.Graphics.DrawString(richTextBox1.Text, richTextBox1.Font,
Brushes.Black, 100, 20);
         e.Graphics.PageUnit = GraphicsUnit.Inch;
      }

      private void button1_Click_1(object sender, EventArgs e)
      {
         printPreviewDialog1.Document = printDocument1;

         // Show PrintPreview Dialog
         printPreviewDialog1.ShowDialog();

      }

      private void button2_Click(object sender, EventArgs e)
      {
         //PrintDialog associate with PrintDocument;
         printDialog1.Document = printDocument1;

         if (printDialog1.ShowDialog() == DialogResult.OK)
```

```
            {
                printDocument1.Print();
            }

        }
    }
}
```

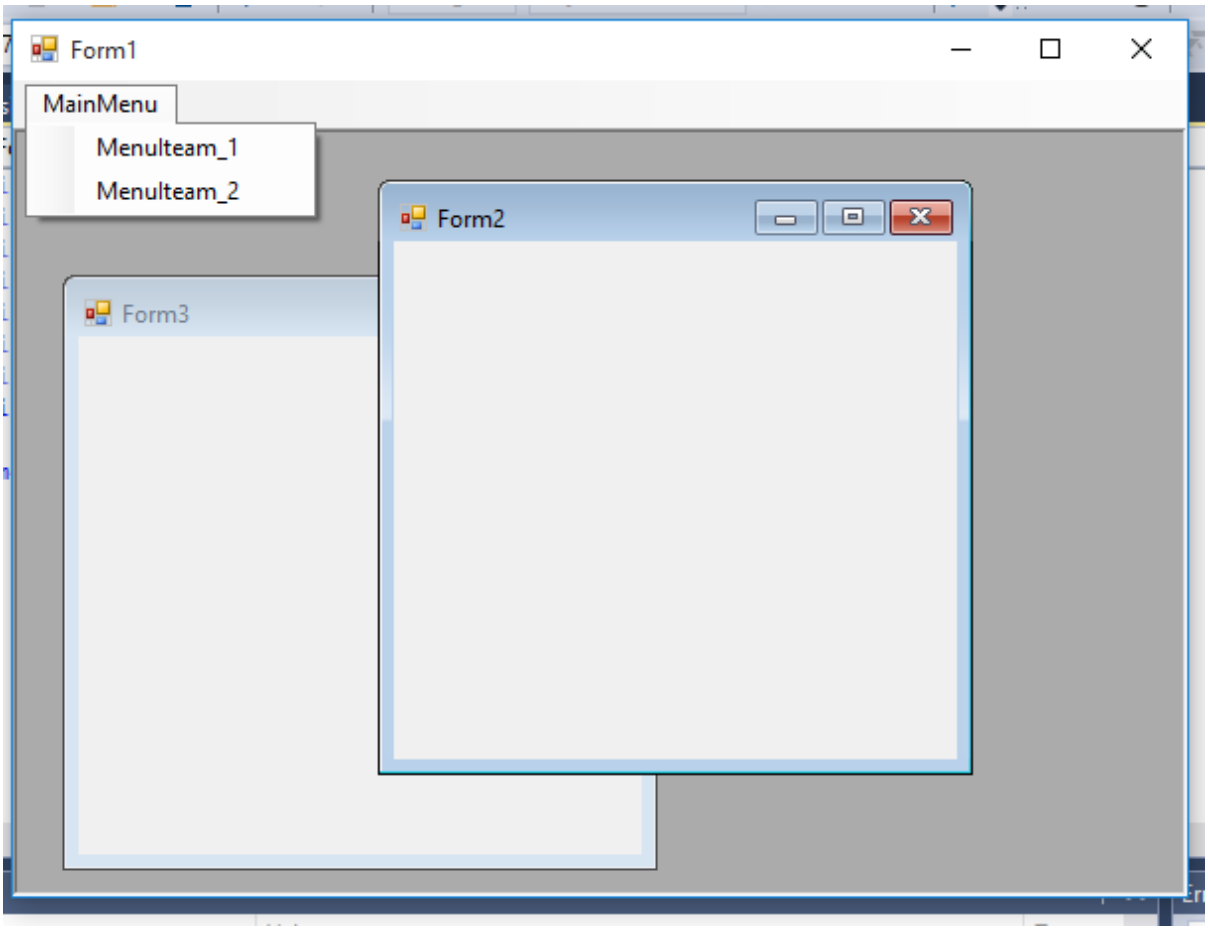
OUTPUT:



e) Create Menu Strip in Window form Application

```
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;

namespace WindowsFormsApplication7
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void Form1_Load(object sender, EventArgs e)
      {
         IsMdiContainer = true;

      }

      private void menuStripToolStripMenuItem_Click(object sender, EventArgs e)
      {
         Form2 frm2 = new Form2();
         frm2.Show();
         frm2.MdiParent = this;
      }

      private void menuIteam2ToolStripMenuItem_Click(object sender, EventArgs e)
      {
         Form3 frm3 = new Form3();
         frm3.Show();
         frm3.MdiParent = this;
      }
   }
}
```

OUTPUT:



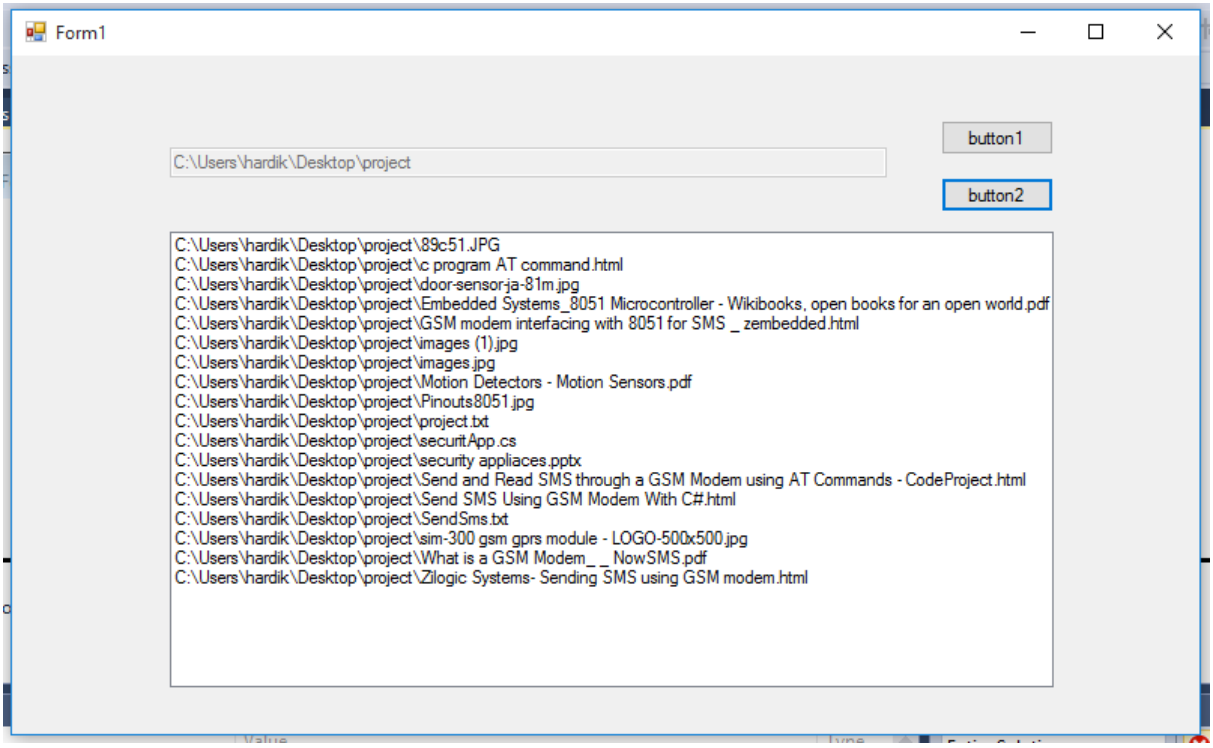
PRACTICAL - 6

a) FolderBrowserDialog

```
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;

namespace WindowsFormsApplication12
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void Form1_Load(object sender, EventArgs e)
      {

      }

      private void button1_Click(object sender, EventArgs e)
      {
         FolderBrowserDialog folderBrowserDlg = new FolderBrowserDialog();
         // A new folder button will display in FolderBrowserDialog.
         folderBrowserDlg.ShowNewFolderButton = true;
         //Show FolderBrowserDialog
         DialogResult dlgResult = folderBrowserDlg.ShowDialog();
         if (dlgResult.Equals(DialogResult.OK))
         {
            //Show selected folder path in textbox1.
            textBox1.Text = folderBrowserDlg.SelectedPath;
            //Browsing start from root folder.
            Environment.SpecialFolder rootFolder = folderBrowserDlg.RootFolder;
         }
      }
```

```
        private void button2_Click(object sender, EventArgs e)
        {
           if (!textBox1.Text.Equals(String.Empty))
           {
              if (System.IO.Directory.GetFiles(textBox1.Text).Length > 0)
              {
                 foreach (string file in System.IO.Directory.GetFiles(textBox1.Text))
                 {
                    //Add file in ListBox.
                    listBox1.Items.Add(file);
                 }
              }
              else
              {
                // listBox1.Items.Add(String.Format("No files Found at location: { 0}",
textBox1.Text));
              }
           }
        }
     }
}
```

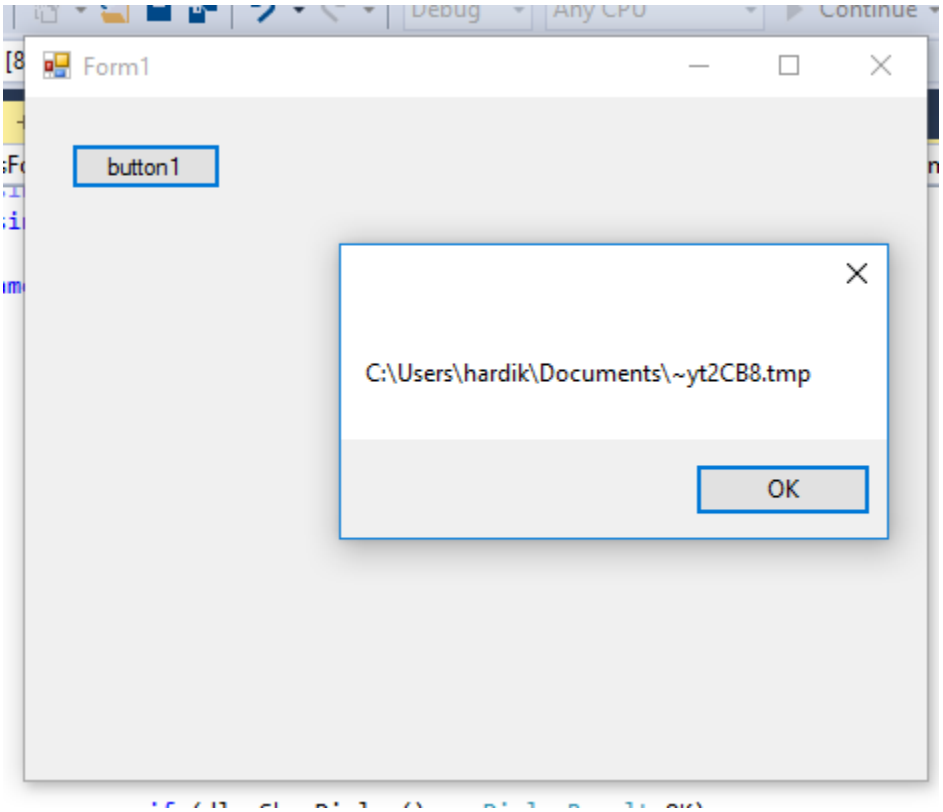
OUTPUT:



b) OpenFileDialog

```
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;

namespace WindowsFormsApplication11
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void button1_Click(object sender, EventArgs e)
      {
         OpenFileDialog dlg = new OpenFileDialog();
         dlg.ShowDialog();

         if (dlg.ShowDialog() == DialogResult.OK)
         {
            string fileName;
            fileName = dlg.FileName;
            MessageBox.Show(fileName);
         }
      }
   }
}
```

OUTPUT:

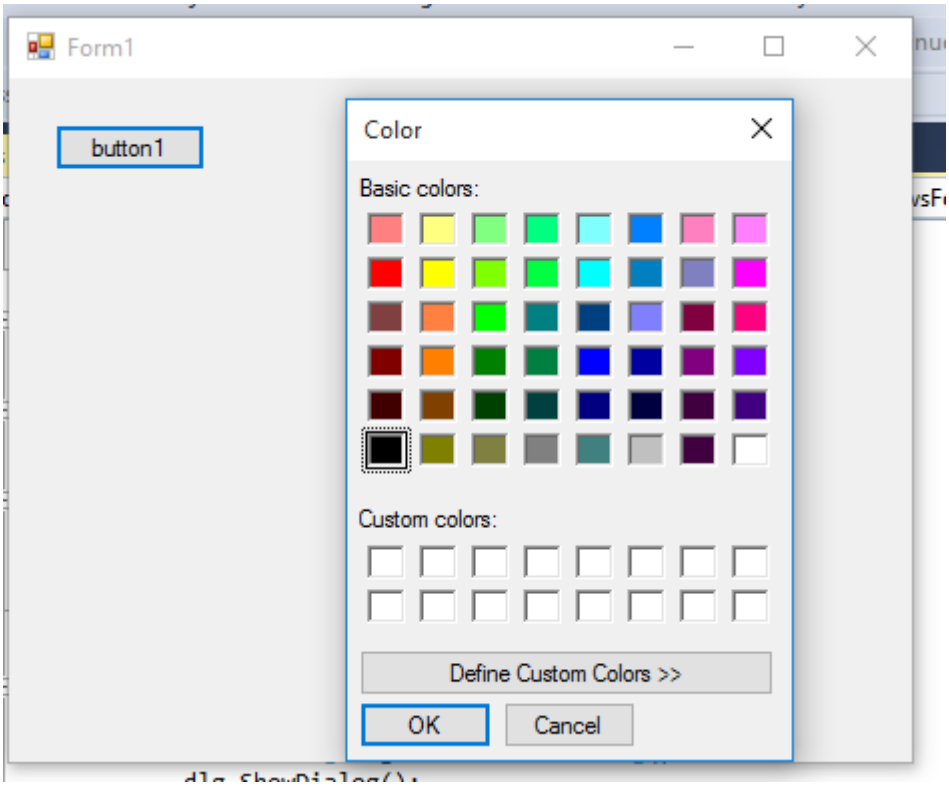


c) ColorDialog

```
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;

namespace WindowsFormsApplication11
{
   public partial class Form1 : Form
   {
      public Form1()
```

```
        {
            InitializeComponent();
        }

        private void button1_Click(object sender, EventArgs e)
        {
            ColorDialog dlg = new ColorDialog();
            dlg.ShowDialog();

            if (dlg.ShowDialog() == DialogResult.OK)
            {
                string str = null;
                str = dlg.Color.Name;
                MessageBox.Show(str);
            }
        }
    }
}
```

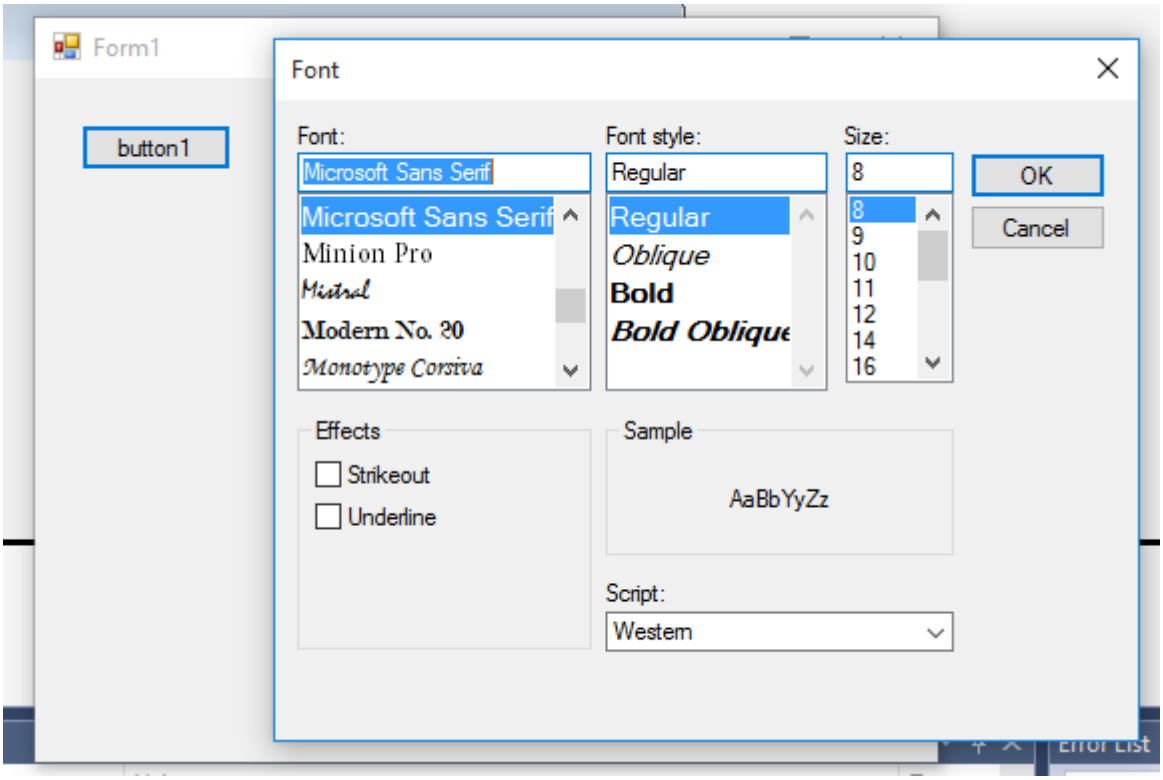
OUTPUT:



d) FontDilalog

```
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;

namespace WindowsFormsApplication11
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
      }

      private void button1_Click(object sender, EventArgs e)
      {
         FontDialog dlg = new FontDialog();
         dlg.ShowDialog();

         if (dlg.ShowDialog() == DialogResult.OK)
         {
            string fontName;
            float fontSize;
            fontName = dlg.Font.Name;
            fontSize = dlg.Font.Size;
            MessageBox.Show(fontName + "    " + fontSize);
         }
      }
   }
}
```

OUTPUT:



e) SaveFileDialog Control

```
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.IO;

namespace WindowsFormsApplication12
{
   public partial class Form1 : Form
   {
      public Form1()
      {
         InitializeComponent();
```

```
        }

        private void Form1_Load(object sender, EventArgs e)
        {

        }

        private void button1_Click(object sender, EventArgs e)
        {
              saveFileDialog1.Filter = "Text File|.txt";
            saveFileDialog1.FileName = String.Empty;
            saveFileDialog1.DefaultExt = ".txt";
         DialogResult result = saveFileDialog1.ShowDialog();
              if (result == DialogResult.OK)
            {
                //Create a file stream using the file name
                FileStream fs = new FileStream(saveFileDialog1.FileName,
FileMode.Create);
                    StreamWriter writer = new StreamWriter(fs);
                    writer.Write(textBox1.Text);
                    writer.Close();
    }
  }
}
```

OUTPUT: