1. Console program in C# implementing the concept of OOP

```
using System;

namespace OOPDemo
{
    abstract class Animal
    {
        private string name;
        public string Name { get { return name; } set { name = value; } }

        public abstract void MakeSound();
    }

    class Dog : Animal
    {
        public override void MakeSound()
        {
            Console.WriteLine($"{Name} says: Woof! Woof!");
        }
    }

    class Program
    {
        static void Main(string[] args)
        {
            Dog myDog = new Dog();
            myDog.Name = "Buddy";
            myDog.MakeSound();
        }
    }
}
```

---

2. Console program in C# illustrating Generic Collections

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

class GenericCollectionsDemo
{
    static void Main()
```

```
    {
        List<string> fruits = new List<string> { "Apple", "Banana" };

        Dictionary<int, string> users = new Dictionary<int, string> { { 
101, "Alice" } };

        Stack<int> numbers = new Stack<int>();
        numbers.Push(10);

        Queue<string> tasks = new Queue<string>();
        tasks.Enqueue("Clean Room");

        Console.WriteLine("Generic Collections: List, Dictionary, Stack, 
and Queue initialized.");
    }
}
```

---

3. Console program in C# illustrating Non-Generic Collections

```
using System;
using System.Collections;

class NonGenericCollectionsDemo
{
    static void Main()
    {
        ArrayList al = new ArrayList { 1, "Mixed Data" };

        Hashtable ht = new Hashtable { { "ID", 123 }, { "Name", "Bob" } };

        SortedList sl = new SortedList { { 2, "Item B" }, { 1, "Item A" } 
};

        Stack st = new Stack();
        st.Push("Top Item");

        Queue qu = new Queue();
        qu.Enqueue("First Item");

        Console.WriteLine("Non-Generic Collections initialized and 
demonstrated.");
    }
```

```
}
```

---

4. Windows Application using VB.NET

```
Imports System.Windows.Forms
Imports System.Drawing

Public Class MyWindowApp
    Inherits Form

    Public Sub New()
        Me.Text = "VB.NET Window Application"
        Me.Size = New Size(300, 200)

        Dim btn As New Button()
        btn.Text = "Click Me"
        btn.Location = New Point(100, 50)

        ' Simple Event Handler
        AddHandler btn.Click, Sub(sender, e) MessageBox.Show("Hello from
VB.NET Window!")

        Me.Controls.Add(btn)
    End Sub

    <STAThread()>
    Shared Sub Main()
        Application.EnableVisualStyles()
        Application.Run(New MyWindowApp())
    End Sub
End Class
```

---

5. Web Application using C#

```
using Microsoft.AspNetCore.Builder;
using Microsoft.Extensions.Hosting;

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

```
        var builder = WebApplication.CreateBuilder(args);
        var app = builder.Build();

        app.MapGet("/", () => "Welcome to the C# Web Application!");

        app.Run();
    }
}
```