Practical No: 1(a)

1.Working with basic C# and ASP .NET

Aim: Create an application that obtains four int values from the user and displays the product.

Code:

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

namespace WebApplication30
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void TextBox4_TextChanged(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            {
                int x, y, z, p;
                x = Convert.ToInt16(TextBox1.Text);
                y = Convert.ToInt16(TextBox2.Text);
                z = Convert.ToInt16(TextBox3.Text);
                p = Convert.ToInt16(TextBox4.Text);
                int q = x * y * z * p;
                TextBox5.Text = Convert.ToString(q);
            }
        }
    }
}
```

Source code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication30.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
```

```
            <br />
            <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
            <br />
            <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
            <br />
            <asp:TextBox ID="TextBox4" runat="server"
OnTextChanged="TextBox4_TextChanged"></asp:TextBox>
            <br />
            <asp:TextBox ID="TextBox5" runat="server"></asp:TextBox>
            <br />
            <br />
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="Button" />
        </div>
    </form>
</body>
</html>
```

Output:

Practical No. 1(b)

Aim:Create an application to demonstrate string operations.

Code:

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

namespace WebApplication31
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void TextBox2_TextChanged(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            string str1 = TextBox1.Text;
            string[] words = str1.Split(' ');
            for (int i = 0; i < words.Length; i++)
            {
                TextBox2.Text = TextBox2.Text + words[i] + "\r\n";
            }
        }
    }
}
```

Source code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication31.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <br />
            <asp:TextBox ID="TextBox2" runat="server"
OnTextChanged="TextBox2_TextChanged" TextMode="MultiLine"></asp:TextBox>
            <br />
            <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
            <br />
            <asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>
```

```
            <br />
            <br />
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="Button" />
        </div>
    </form>
</body>
</html>
```

Output:

Practical No. 1(c)

Aim: When an application that receives the following information from a set of students: (Student Id, Student Name, Course Name, Date of birth) The application should also display the information of all the students once the data is Entered. Implement this using an Array of Structures.

Code:

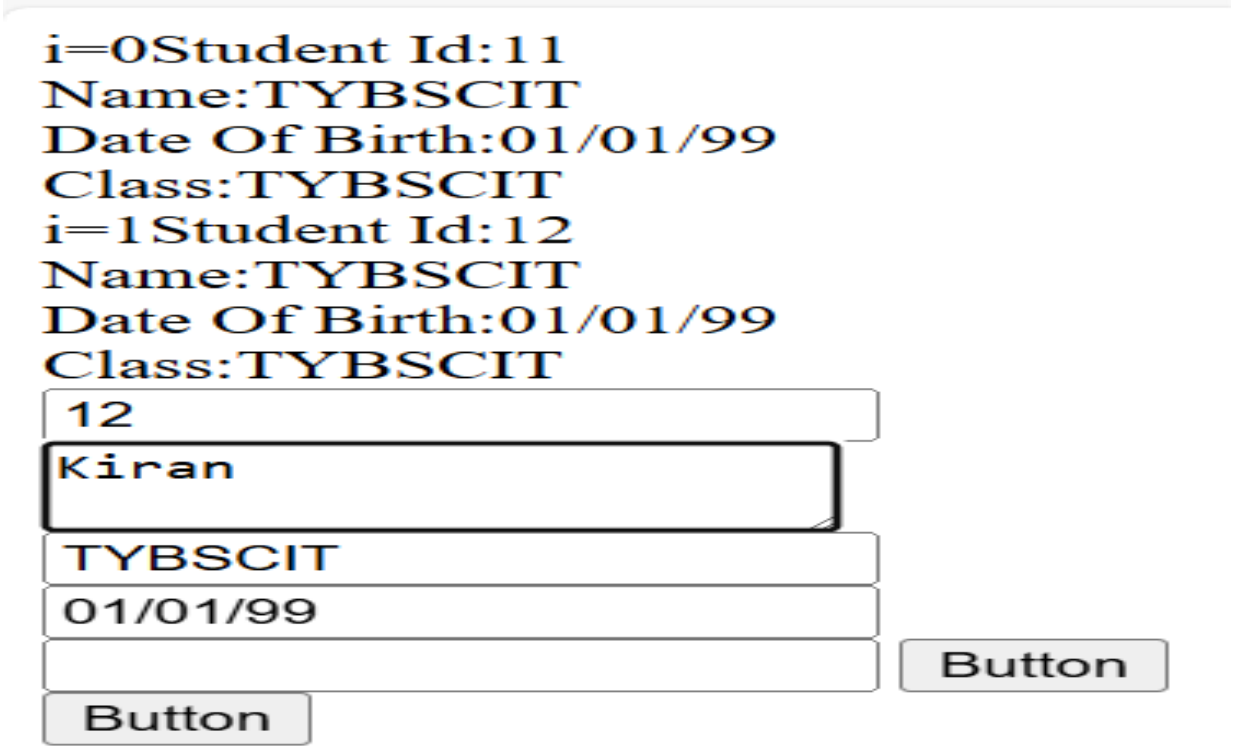
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
struct Student
{
    public string studid, name, cname;
    public string dob;
}
;


namespace WebApplication32
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        static Student[] s = new Student[5];
        static int i;

        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void TextBox1_TextChanged(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            Response.Write("i=" + i);
            s[i].studid = TextBox1.Text;
            s[i].name = TextBox2.Text;
            s[i].cname = TextBox3.Text;
            s[i].dob = TextBox4.Text;
            i++;

        }

        protected void Button2_Click(object sender, EventArgs e)
        {
            for (int y = 0; y < i; y++)
            {
                Response.Write("i=" + y);
                Response.Write("Student Id:" + s[y].studid + "<br>");
                Response.Write("Name:" + s[y].cname + "<br>");
                Response.Write("Date Of Birth:" + s[y].dob + "<br>");
```

```
                Response.Write("Class:" + s[y].cname + "<br>");
            }
        }
    }
}
```

Source code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication32.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:TextBox ID="TextBox1" runat="server"
OnTextChanged="TextBox1_TextChanged"></asp:TextBox>
            <br />
            <asp:TextBox ID="TextBox2" runat="server"
TextMode="MultiLine"></asp:TextBox>
            <br />
            <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
            <br />
            <asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>
            <br />
            <asp:TextBox ID="TextBox5" runat="server"></asp:TextBox>
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="Button" />
            <br />
            <asp:Button ID="Button2" runat="server" OnClick="Button2_Click"
Text="Button" />
        </div>
    </form>
</body>
</html>
```

Output:


i=0Student Id:11
Name:TYBSCIT
Date Of Birth:01/01/99
Class:TYBSCIT
i=1Student Id:12
Name:TYBSCIT
Date Of Birth:01/01/99
Class:TYBSCIT
12
Kiran
TYBSCIT
01/01/99
Button
Button

Practical No. 1(d)

Aim: Create an application to demonstrate the following operation:
i.Generate Fibonacci Series.

Code:

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

namespace WebApplication33
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            int f1 = 0, f2 = 1, f3, n, co;
            n = int.Parse(TextBox1.Text);
            co = 3;
            Response.Write("Fibonaaci Series:");
            Response.Write(f1 + "\t" + f2);
            while (co <= n)
            {
                f3 = f1 + f2;
                Response.Write("\t" + f3);
                f1 = f2;
                f2 = f3;
                co++;
            }
        }
    }
}
```

Source code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication33.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
```

```
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="Button" />
            <br />
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
        </div>
    </form>
</body>
</html>
```

Output:

Practical No. 1(d)

Aim: Create an application to demonstrate the following operation:
ii. Test For Prime Number.

Code:

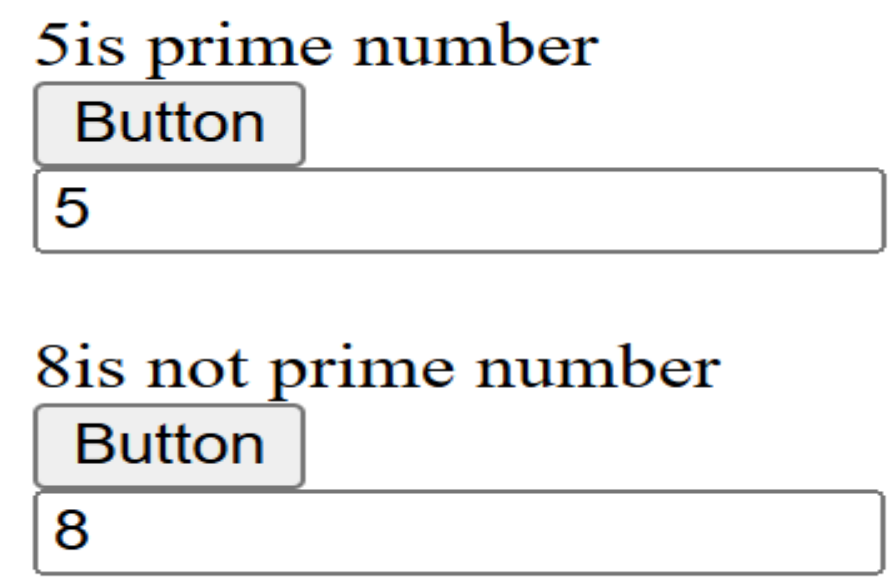
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace WebApplication34
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            int n, i, c;
            n = int.Parse(TextBox1.Text);
            for (c = 2; c <= n - 1; c++)
            {
                if ((n % c) == 0)
                    break;
            }
            if (n == 1)
                Response.Write(n + "is neither prime nor composite");
            else if (c < n - 1)
                Response.Write(n + "is not prime number");
            else
                Response.Write(n + "is prime number");
        }
    }
}
```

Source code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication34.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
```

```
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="Button" />
            <br />
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
        </div>
    </form>
</body>
</html>
```

Output:



Practical No. 1(d)

Aim: Create an application to demonstrate the following operation:
iii. Test For vowels

Code:

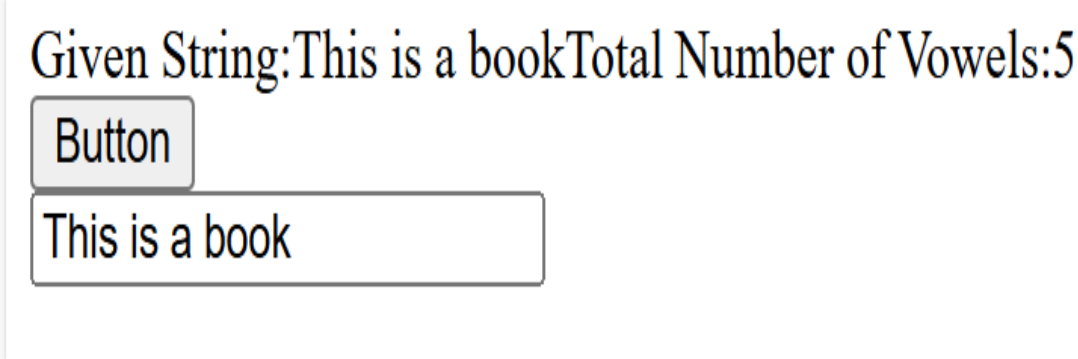
```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

namespace WebApplication35
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            string ch;
            int count = 0;
            ch = TextBox1.Text;
            for(int i= 0; i < ch.Length; i++)
            {
                if ((ch.Substring(i, 1) == "a") || (ch.Substring(i, 1) == "e") ||
                (ch.Substring(i, 1) == "i") || (ch.Substring(i, 1) == "o") ||
               (ch.Substring(i, 1) == "u"))
                {
                    count++;
                }
            }
            Response.Write("Given String:" + ch);
            Response.Write("Total Number of Vowels:" + count);
        }
    }
}
```

Source code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication36.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
```

```
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="Button" />
            <br />
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
        </div>
    </form>
</body>
</html>
```

Output:



Practical No. 1(d)

Aim: Create an application to demonstrate the following operation:
iv. Use of foreach loop with arrays.

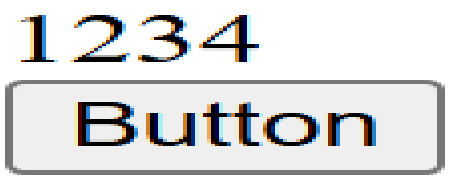
Code:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace WebApplication37
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            int[] a = { 1, 2, 3, 4 };
            foreach (int x in a)
                Response.Write(x);
        }
    }
}
```

Source code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication37.WebForm1" %>

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="Button" />
        </div>
    </form>
</body>
</html>
```

Output:



Practical No. 1(d)

Aim: Create an application to demonstrate the following operation:
v. Reverse a number and find sum of digits of a number

Code:

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

namespace WebApplication38
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {

        }

        protected void Button1_Click(object sender, EventArgs e)
        {
            int n, m, r = 0, d, sum = 0;
            n = int.Parse(TextBox1.Text);
            m = n;
            while (n > 0)
            {
                d = n % 10;
                r = r * 10 + d;
                sum = sum + d;
                n = n / 10;
            }
            Response.Write("Reverse of" + m + "=" + r + "<br>");
            Response.Write("Sum of its digits:" + sum);
        }
    }
}
```

Source code:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication38.WebForm1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click"
Text="Button" />
```

```
            <br />
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
        </div>
    </form>
</body>
</html>
```

Output: