Practical No. 01

**Working with basic C# and ASP .NET**

**Aim:**

**a.) Create an application that obtains four int values from the user and displays the product.**

**b.) Create an application to demonstrate string operations.**

**c.) Create an application that receives the (Student Id, Student Name, Course Name, Date of Birth) information from a set of students. The application should also display the information of all the students once the data entered.**

**d.) Create an application to demonstrate following operations**

**i. Generate Fibonacci series. ii. Test for prime numbers.**

**iii. Test for vowels. iv. Use of foreach loop with arrays v. Reverse a number and find the sum of digits of a number.**

**Name: Ankit Singh Chauhan**

**Roll No: 64**

**Class: T.Y.BSc.IT**

**Sub: Advanced Web Programming**

**Grade:**

**Sign:**

**Aim:**

**a.) Create an application that obtains four int values from the user and displays the product**

**Code:**

using System; namespace Practicalno1

{

public partial class Form1 : Form

{

public Form1()

{

InitializeComponent();

}

private void button1\_Click(object sender, EventArgs e)

{

int A, B, C, D, s;

A = int.Parse(textBox1.Text); B = int.Parse(textBox2.Text); C = int.Parse(textBox3.Text); D = int.Parse(textBox4.Text); s = A \* B \* C \* D;

textBox5.Text = s.ToString();

}

private void label1\_Click(object sender, EventArgs e)

{

}

}

}

**Output:**

Graphical user interface, text, application

Description automatically generated

**Aim:**

**b.) 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 practical2b.Properties

{

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 str1;

str1= TextBox1.Text; string[] words= str1.Split(' ');

for (int i = 0; i < words.Length; i++)

{

TextBox2.Text = TextBox2.Text + words[i] + "\r\n" ;

}

}

}

}

**Output:**

Graphical user interface, application

Description automatically generated

**Aim:**

**c.) Create an application that receives the (Student Id, Student Name, Course Name, Date of Birth) information from a set of students. The application should also display the information of all the students once the data entered.**

**Code:**

using System;

using System.Collections.Generic; using System.Linq;

using System.Web;

using System.Web.UI;

using System.Web.UI.WebControls;

namespace practical 1c

{

struct student

{

public string name, id, cname, dob;

}

public partial class WebForm1 : System.Web.UI.Page

{

static student[] s = new student[3]; static int i;

protected void Page\_Load(object sender, EventArgs e)

{

Response.Write("i=" + i); s[i].id = TextBox1.Text; s[i].name = TextBox2.Text; s[i].cname = TextBox3.Text;

s[i].dob = TextBox4.Text; i++;

}

protected void Button1\_Click(object sender, EventArgs e)

{

for (int y = 0; y < i; y++)

{

Response.Write("i=" + y + "<br> "); Response.Write("student id: " + s[y].id + "<br>"); Response.Write("Name: " + s[y].name + "<br>");

Response.Write("course Name: " + s[y].cname + "<br>"); Response.Write("Date Of Birth: " + s[y].dob + "<br>");

}

}

}

}

**Output:**

Graphical user interface, text

Description automatically generated

**Aim:**

**d.) Create an application to demonstrate following operations**

**i. Generate Fibonacci series. ii. Test for prime numbers.**

**iii. Test for vowels. iv. Use of foreach loop with arrays v. Reverse a number and find the sum of digits of a number.**

1. **Generate Fibonacci series. Code:**

using System; namespace pracno1d

{

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, i;

n = int.Parse(TextBox1.Text); i = 0;

Response.Write("Fibonacci series"); Response.Write(f1 + "\t" + f2); while (i <= n)

{

f3 = f1 + f2; Response.Write("\t" + f3); f1 = f2; f2 = f3;

i++;

}

}

}

}

**Output:**

Graphical user interface, text, application, email

Description automatically generated

1. **Test for prime numbers. Code:**

using System;

using System.Collections.Generic; using System.Linq;

using System.Web; using System.Web.UI;

using System.Web.UI.WebControls;

namespace pracno1d.Properties

{

public partial class WebForm1 : System.Web.UI.Page

{

protected void Page\_Load(object sender, EventArgs e)

{

}

protected void Button2\_Click(object sender, EventArgs e)

{

int n, i;

n = int.Parse(TextBox1.Text); for(i=2; i<=n-1; i++)

{

if ((n % i) == 0) break;

}

if (n == 1)

Label2.Text = n + "is neither prime nor composite"; else if (i < n - 1)

Label2.Text = n + "is not prime number"; else

Label2.Text = n + "is prime number";

}

}

**}**

**Output:**

Graphical user interface, text, application

Description automatically generated

1. **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 pracno1d.Properties

{

public partial class WebForm2 : 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); Label2.Text = "Total number of vowels:" + count;

}

}

}



**Output:**

Graphical user interface, text, application

Description automatically generated



1. **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 pracno1d.Properties

{

public partial class WebForm3 : 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 i in a) Response.Write(i);

}

}

}

**Output:**

Graphical user interface, application

Description automatically generated

1. **Reverse a number and find the 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 pracno1d

{

public partial class WebForm2 : 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;

}

Label2.Text = "Reverse of" + m + "=" + r + "<br>"; Label3.Text = "sum of its digits:" + sum;

}

}

}

**Output:**

Graphical user interface, text, application

Description automatically generated