

THE NEW COLLEGE (AUTONOMOUS)

CHENNAI -14

P.G. DEPARTMENT OF COMPUTER SCIENCE

.NET TECHNOLOGIES LAB



I M.Sc. COMPUTER SCIENCE
(II- Semester)

Name :

Reg.No :

Subject : **.NET TECHNOLOGIES LAB**

Subject Code : 20MJMP203

THE NEW COLLEGE (AUTONOMOUS)

P.G. DEPARTMENT OF COMPUTER SCIENCE

Name :

Class :

Register No :

Subject Name : **.NET TECHNOLOGIES LAB**

Subject Code :

Certified to be Bonafide Record of work done in the Computer Science Laboratory of **The New College**, during the academic year 2023 – 2024 by the above candidate.

Professor in – charge

Head of the Department

Submitted for the practical Examination held on **Mar / Apr 2024** in Computer Science Laboratory of **The New College**.

Internal Examiner

External Examiner

Place:

Date:

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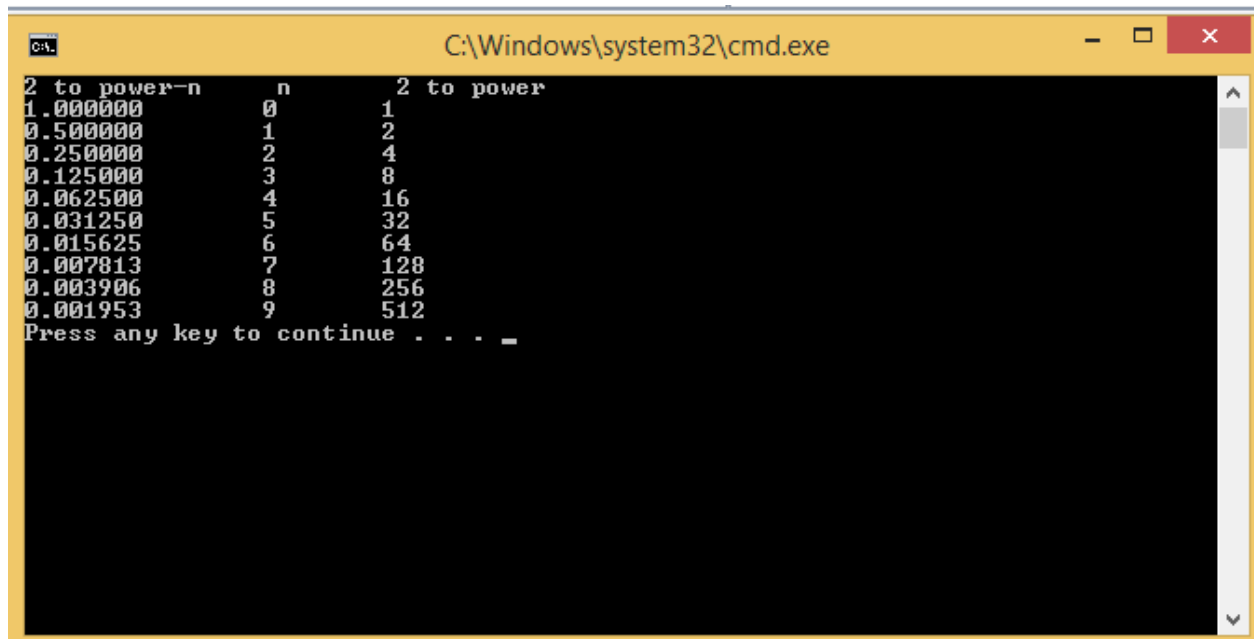
Ex.No:01

DATE IN VARIOUS FORMATS

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
namespace DataAndTime
{
class Program
{
static int Main()
{
DateTime date=new DateTime(2023,12,22);

Console.WriteLine("Some Date Formats :");
Console.WriteLine("Date and Time: {0}", date);
Console.WriteLine(date.ToString("yyyy-MM-dd"));
Console.WriteLine(date.ToString("dd-MM-yy"));
Console.WriteLine(date.ToString("M/d/yyyy"));
Console.WriteLine(date.ToString("M/d/yy"));
Console.WriteLine(date.ToString("MM/dd/yyyy"));
Console.WriteLine(date.ToString("MM/dd/yy"));
Console.WriteLine(date.ToString("yy-MM-dd"));
Console.Read();
return 0;
}
}
}
```

OUTPUT:



```
C:\Windows\system32\cmd.exe

2 to power-n      n      2 to power
1.000000          0          1
0.500000          1          2
0.250000          2          4
0.125000          3          8
0.062500          4         16
0.031250          5         32
0.015625          6         64
0.007813          7        128
0.003906          8        256
0.001953          9        512
Press any key to continue . . . _
```

Ex.No:02**DATE AND TIME IN VARIOUS FORMATS****CODING:**

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
namespace DateTimeFormat
{
    class Program
    {
        static void Main(string[] args)
        {
            DateTime aDate = DateTime.Now;
            Console.WriteLine(aDate.ToString("MM/dd/yyyy"));
            Console.WriteLine(aDate.ToString("dddd, dd MMMM yyyy"));
            Console.WriteLine(aDate.ToString("dddd, dd MMMM yyyy"));
            Console.WriteLine(aDate.ToString("dddd, dd MMMM yyyy"));
            Console.WriteLine(aDate.ToString("dddd, dd MMMM yyyy"));
            Console.WriteLine(aDate.ToString("dddd, dd MMMM yyyy"));
            Console.WriteLine(aDate.ToString("dddd, dd MMMM yyyy HH:mm:ss"));
            Console.WriteLine(aDate.ToString("MM/dd/yyyy HH:mm"));
            Console.WriteLine(aDate.ToString("MM/dd/yyyy hh:mm tt"));
            Console.WriteLine(aDate.ToString("MM/dd/yyyy H:mm"));
            Console.WriteLine(aDate.ToString("MM/dd/yyyy h:mm tt"));
            Console.WriteLine(aDate.ToString("MM/dd/yyyy HH:mm:ss"));
            Console.WriteLine(aDate.ToString("MMMM dd"));
            Console.WriteLine(aDate.ToString("yyyy'-MM'-'dd'T'HH':mm':ss.fffffffK"));
            Console.WriteLine(aDate.ToString("ddd, dd MMM yyy HH':mm':ss 'GMT'"));
            Console.WriteLine(aDate.ToString("yyyy'-MM'-'dd'T'HH':mm':ss"));
            Console.WriteLine(aDate.ToString("HH:mm"));
            Console.WriteLine(aDate.ToString("hh:mm tt"));
            Console.WriteLine(aDate.ToString("H:mm"));
            Console.WriteLine(aDate.ToString("h:mm tt"));
            Console.WriteLine(aDate.ToString("HH:mm:ss"));
            Console.WriteLine(aDate.ToString("yyyy MMMM"));
            Console.ReadKey();
        }
    }
}
```

OUTPUT:

```
03/20/2019
Wednesday, 20 March 2019
Wednesday, 20 March 2019
Wednesday, 20 March 2019
Wednesday, 20 March 2019
Wednesday, 20 March 2019 11:48:59
03/20/2019 11:48
```

Ex.No:03

LOGIN PAGE

HTML CODING:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="login_control.aspx.cs" Inherits="login_control.login_control"%>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:Label ID="Label1" runat="server" Text="Username"></asp:Label>
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~
            <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
            <br />
            <br />
            <asp:Label ID="Label2" runat="server" Text="Password"></asp:Label>
&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~
            <asp:TextBox ID="TextBox2" runat="server" TextMode="Password"></asp:TextBox>
            <asp:Button ID="Button1" runat="server" OnClick="Button1_Click" Text="Submit" />
            <p>
                <asp:Label ID="Label3" runat="server"></asp:Label>
            </p>
        </div>
    </form>
</body>
</html>
```

BUTTON CODING:-

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace login_control
{
    public partial class login_control : System.Web.UI.Page
    {
        protected void Button1_Click(object sender, EventArgs e)
        {
            if(TextBox1.Text.Equals("asif") && (TextBox2.Text.Equals("asif7410")))
            {
                Label3.Text = "You have successfully logged in " + TextBox1.Text;
            }else
            {
                Label3.Text = "Username or Password is incorrect";
            }
        }
    }
}
```

OUTPUT:

Username

Password

You have successfully logged in asif

Ex.No:04

EXCEPTION HANDLING

CODING:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
namespace Exceptionhandling
{
    class Program
    {
        static void Main(string[] args)
        {
            try
            {
                int num1, num2;
                Decimal result;
                Console.WriteLine("Divide Program you Enter Two number");
                Console.WriteLine("Enter Ist Number");
                num1 = Convert.ToInt32(Console.ReadLine());
                Console.WriteLine("Enter IInd Number");
                num2 = Convert.ToInt32(Console.ReadLine());
                result = (decimal)num1 / (decimal)num2;
                Console.WriteLine("Divide:" + result.ToString());
                Console.ReadLine();
            }
            catch(DivideByZeroException dex)
            {
                Console.WriteLine("You have Entered 0");
                Console.WriteLine("More Details about error:\n\n"+dex.ToString()+"\n\n");
                //goto Label;
            }
            catch(FormatException fex)
            {
                Console.WriteLine("Invalid Input");
                Console.WriteLine("More Details about
creat:\n\n"+fex.ToString()+"\n\n");
                //goto Label;
            }
            catch(Exception ex)
            {
                Console.WriteLine("Other exception raised" + ex.ToString() + "\n\n");
                //goto Label;
            }
        }
    }
}
```



```
        finally
        {
            Console.WriteLine("Finally block:for Continue Press Enter and for exit.press ctrl+c");
            Console.ReadLine();
        }
    }
}
```

OUTPUT:

```
Divide Program you Enter Two number
Enter Ist Number
5
Enter IInd Number
10
Divide:0.5

Finally block:for Continue Press Enter and for exit.press ctrl+c

Press any key to continue . . .
```

Ex.No:05

FILE HANDLING

```
using System;
using System.IO;
namespace myapplication
{
    class Program
    {
        static void Main(string[] args)
        {
            string writeText = ("hello world!");
            File.WriteAllText("filename.txt", writeText);
            string readText = File.ReadAllText("filename.txt");
            Console.WriteLine(readText);
            Console.ReadLine();
        }
    }
}
```

OUTPUT:



Ex.No:06

WORKING WITH ARRAY LIST

CODING:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
namespace AccessArray {
class program{
static void Main (string [] args) {
    int [] numbers = {1,2,3};
    Console.WriteLine("Element in first index :"+numbers[0]);
    Console.WriteLine("Element in Second index: "+ numbers[1]);
    Console.WriteLine("Element in Third index: "+ numbers[2]);
    Console.ReadLine();
}
}
}
```

OUTPUT:

Element in first index: 1

Element in Second index: 2

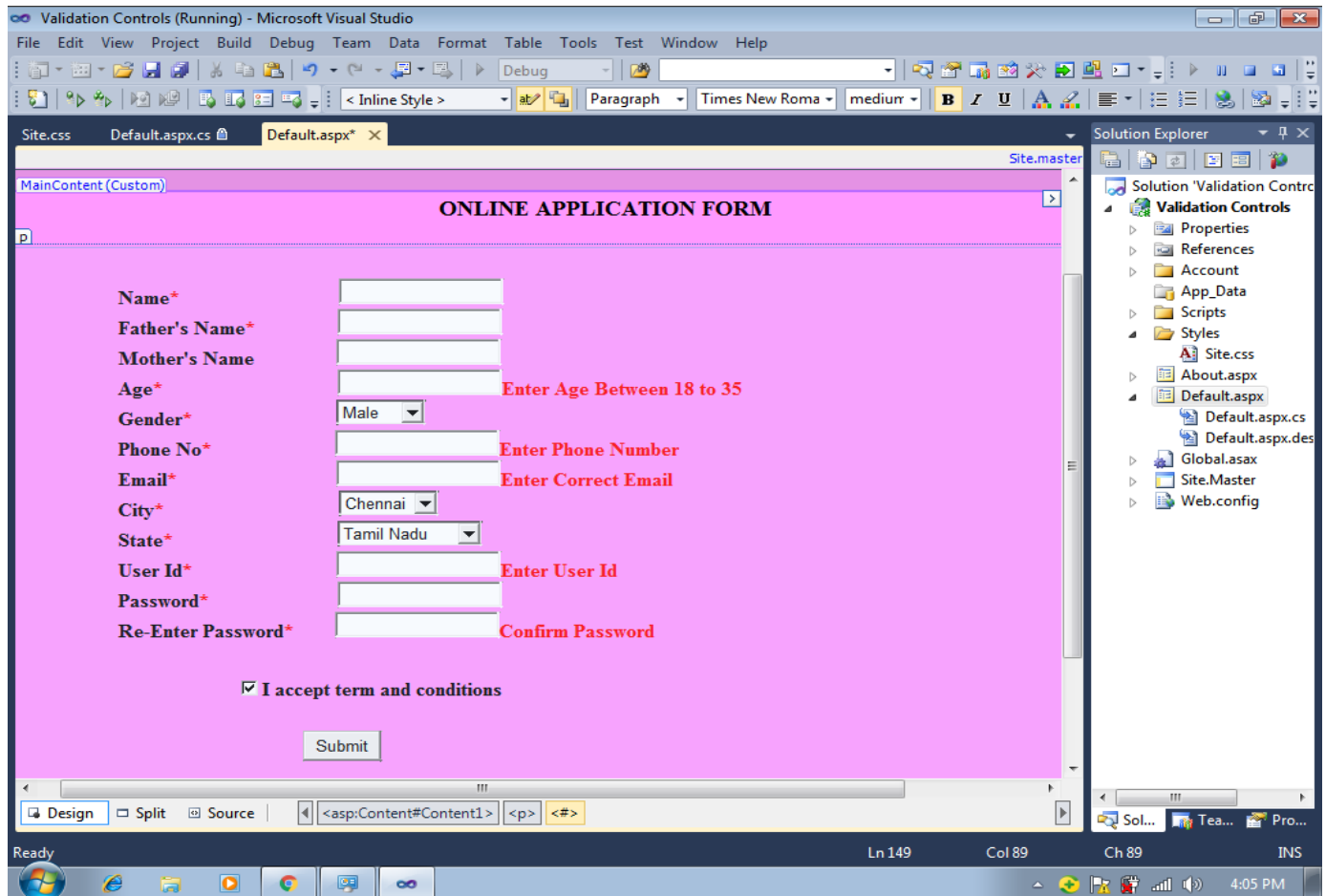
Element in Third index: 3

Ex.No:07

VALIDATION CONTROLS

DEFAULT.ASPX

Design:



CODING:

```
<%@ Page Title="Home Page" Language="C#" MasterPageFile="~/Site.master"
```

```
AutoEventWireup="true"
```

```
CodeBehind="Default.aspx.cs" Inherits="Validation_Controls._Default" %>
```

```
<asp:Content ID="HeaderContent" runat="server" ContentPlaceHolderID="HeadContent">
```

```
</asp:Content>
```

```
<asp:Content ID="Content1" runat="server" contentplaceholderid="MainContent">
```

```
<p align="center"
```

```
style="font-family: 'Times New Roman', Times, serif; font-size: large; font-weight: bold; color: #000000;"
```

```
title="APPLICATION FORM">
```

```
ONLINE APPLICATION FORM</p>
```

```
<p style="font-family: 'Times New Roman', Times, serif; font-size: medium; font-style: normal; font-weight: bold; color: #000000;"> <br >
```

```
style="font-family: 'Times New Roman', Times, serif; font-size: medium; font-style: normal; font-weight: bold; color: #000000" />
```

```

Name<asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server"
    ControlToValidate="TextBox1" ErrorMessage="Enter Name" Font-Size="Medium"
    ForeColor="Red">*</asp:RequiredFieldValidator>
<asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
<br />
Father's Name<asp:RequiredFieldValidator ID="RequiredFieldValidator2"
    runat="server" ControlToValidate="TextBox2" ErrorMessage="Enter Father Name"
    Font-Size="Medium" ForeColor="Red">*</asp:RequiredFieldValidator>
<asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
Mother
<asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
<br />
Age<asp:RequiredFieldValidator ID="RequiredFieldValidator3" runat="server"
    ControlToValidate="TextBox4" ErrorMessage="Enter Age" Font-Size="Medium"
    ForeColor="Red">*</asp:RequiredFieldValidator>
    <asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>
<asp:RangeValidator ID="RangeValidator1" runat="server"
    ControlToValidate="TextBox4" ErrorMessage="Enter Age Between 18 to 35"
    ForeColor="Red" MaximumValue="35" MinimumValue="18">Enter Age Between 18 to
35</asp:RangeValidator><br />
Gender<asp:RequiredFieldValidator ID="RequiredFieldValidator4" runat="server"
    ControlToValidate="DropDownList1" ErrorMessage="Select Gender"
    Font-Size="Medium" ForeColor="Red">*</asp:RequiredFieldValidator>
<asp:DropDownList ID="DropDownList1" runat="server">
    <asp:ListItem>Male</asp:ListItem>
    <asp:ListItem>Female</asp:ListItem>
</asp:DropDownList>
Phone No<asp:RequiredFieldValidator ID="RequiredFieldValidator5" runat="server"
    ControlToValidate="TextBox5" ErrorMessage="Enter Phone Number"
    Font-Size="Medium" ForeColor="Red">*</asp:RequiredFieldValidator>
<asp:TextBox ID="TextBox5" runat="server"></asp:TextBox>
<asp:RegularExpressionValidator ID="RegularExpressionValidator1" runat="server"
    ControlToValidate="TextBox5" ErrorMessage="Enter Phone Number" ForeColor="Red"
    ValidationExpression="[0-9]{10}">Enter PhoneNumber</asp:RegularExpressionValidator>
Email<asp:RequiredFieldValidator ID="RequiredFieldValidator6" runat="server"
    ControlToValidate="TextBox6" ErrorMessage="Enter Email Id" Font-Size="Medium"
    ForeColor="Red">*</asp:RequiredFieldValidator>
<asp:TextBox ID="TextBox6" runat="server"></asp:TextBox>
<asp:RegularExpressionValidator ID="RegularExpressionValidator2" runat="server"
    ControlToValidate="TextBox6" ErrorMessage="Enter Correct Email" ForeColor="Red"
    ValidationExpression="\w+([-+.'\w+)*@\w+([-.\w+)*\.\w+([-.\w+)*">Enter Correct
Email</asp:RegularExpressionValidator><br />
City<asp:RequiredFieldValidator ID="RequiredFieldValidator7" runat="server"
    ControlToValidate="DropDownList2" ErrorMessage="Select City" Font-Size="Medium"
    ForeColor="Red">*</asp:RequiredFieldValidator>
<asp:DropDownList ID="DropDownList2" runat="server">
    <asp:ListItem>Chennai</asp:ListItem>
    <asp:ListItem>Vellore</asp:ListItem>
    <asp:ListItem>Banglore</asp:ListItem>
    <asp:ListItem>kadapa</asp:ListItem>

```

```

        </asp:DropDownList><br />
State<asp:RequiredFieldValidator ID="RequiredFieldValidator8" runat="server"
    ControlToValidate="DropDownList3" ErrorMessage="Select State"
    Font-Size="Medium" ForeColor="Red">*</asp:RequiredFieldValidator>
<asp:DropDownList ID="DropDownList3" runat="server">
    <asp:ListItem>Tamil Nadu</asp:ListItem>
    <asp:ListItem>Karnataka</asp:ListItem>
    <asp:ListItem>Andra Pradesh</asp:ListItem>
</asp:DropDownList><br/>
User Id<asp:RequiredFieldValidator ID="RequiredFieldValidator11" runat="server"
    ControlToValidate="TextBox9" ErrorMessage="Enter User Id" Font-Size="Medium"
    ForeColor="Red">*</asp:RequiredFieldValidator>
<asp:TextBox ID="TextBox9" runat="server"></asp:TextBox>
<asp:CustomValidator ID="CustomValidator1" runat="server"
    ControlToValidate="TextBox9" ErrorMessage="Enter User Id" ForeColor="Red"
    onservvalidate="CustomValidator1_ServerValidate"></asp:CustomValidator><br />
Password<asp:RequiredFieldValidator
    ID="RequiredFieldValidator9" runat="server" ControlToValidate="TextBox7"
    ErrorMessage="Enter Password" Font-Size="Medium"
    ForeColor="Red">*</asp:RequiredFieldValidator>
    <asp:TextBox ID="TextBox7" runat="server" TextMode="Password">
</asp:TextBox><br />
Re-Enter Password<asp:RequiredFieldValidator ID="RequiredFieldValidator10"
    runat="server" ControlToValidate="TextBox8" ErrorMessage="Confirm Password"
    Font-Size="Medium" ForeColor="Red">*</asp:RequiredFieldValidator>
<asp:TextBox ID="TextBox8" runat="server" TextMode="Password"></asp:TextBox>
<asp:CompareValidator ID="CompareValidator1" runat="server"
    ControlToCompare="TextBox7" ControlToValidate="TextBox8"
    ErrorMessage="Pasword does not match"ForeColor="Red">Confirm
Password</asp:CompareValidator><br />
<asp:CheckBox ID="CheckBox1" runat="server"
    Text="I accept term and conditions" AutoPostBack="True" Checked="True" /><br />
<asp:Button ID="Button1" runat="server" Text="Submit" onclick="Button1_Click" /><br />
<asp:Label ID="Label1" runat="server"></asp:Label><br />
</asp:Content>

```

DEFAULT.ASPX.CS

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace Validation_Controls
{
    public partial class _Default : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
        }
        protected void CustomValidator1_ServerValidate(object source, ServerValidateEventArgs args)
        {
            if (args.Value.Length == 10)
            {
                args.IsValid = true;
            }
            else
            {
                args.IsValid = false;
            }
        }
        protected void Button1_Click(object sender, EventArgs e)
        {
            if (CheckBox1.Checked == true)
            {
                Label1.Text="Updated Successfully";
            }
        }
    }
}
```

Ex.No:08

TREE VIEW CONTROL

HTML CODING:-

```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:TreeView ID="TreeView1" runat="server" ImageSet="Arrows"
OnSelectedNodeChanged="TreeView1_SelectedNodeChanged">
                <HoverNodeStyle BackColor="#FF99FF" Font-Bold="True" Font-Names="Cambria" Font-
Size="X-Large" Font-Underline="False" ForeColor="Red" />
                <LeafNodeStyle BackColor="#333300" Font-Bold="True" Font-Names="Courier New" Font-
Size="Large" ForeColor="#FFCCFF" />
                <Nodes>
                    <asp:TreeNode Text="Home" NavigateUrl="~/Home.aspx" Target="_blank"/>
                    <asp:TreeNode Text="Employee" NavigateUrl="~/Employee.aspx" Target="_blank">
                        <asp:TreeNode Text="Upload Resume" NavigateUrl="~/Upload_Resume.aspx"
Target="_blank" />
                        <asp:TreeNode Text="View Resume" NavigateUrl="~/View_Resume.aspx"
Target="_blank" />
                    </asp:TreeNode>
                    <asp:TreeNode Text="Admin" NavigateUrl="~/Admin.aspx" Target="_blank">
                        <asp:TreeNode Text="Add User" NavigateUrl="~/Add_User.aspx" Target="_blank" />
                        <asp:TreeNode Text="Edit User" NavigateUrl="~/Edit_User.aspx" Target="_blank" />
                        <asp:TreeNode Text="View User" NavigateUrl="~/View_User.aspx" Target="_blank"
/>
                    </asp:TreeNode>
                </Nodes>
                <NodeStyle Font-Names="Tahoma" Font-Size="10pt" ForeColor="Black"
HorizontalPadding="5px" NodeSpacing="0px" VerticalPadding="0px" />
                <ParentNodeStyle Font-Bold="False" />
                <RootNodeStyle BackColor="#6699FF" Font-Bold="True" Font-Italic="False" Font-
Names="Times New Roman" Font-Size="X-Large" ForeColor="#CC00CC" />
                <SelectedNodeStyle Font-Underline="True" ForeColor="#5555DD"
HorizontalPadding="0px" VerticalPadding="0px" />
            </asp:TreeView>
        </form>
    </body>
</html>
```


OUTPUT:-

- ▷ Home
- ▼ Employee
 - ▷ Upload Resume
 - ▷ View Resume
- ▼ Admin
 - ▷ Add User
 - ▷ Edit User
 - ▷ View User

Ex.No:09

TIMER

CODING:

```
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 WindowsFormsApplication2
{
    public partial class Form1 : Form
    {
        int val;
        public Form1()
        {
            InitializeComponent();
        }
        private void Form1_Load(object sender, EventArgs e)
        {
        }
        private void timer1_Tick(object sender, EventArgs e)
        {
            int a = val++;
            textBox1.Text = a.ToString();
        }
        private void button1_Click(object sender, EventArgs e)
        {
            timer1.Start();
        }
        private void button2_Click(object sender, EventArgs e)
        {
            timer1.Stop();
        }
    }
}
```

OUTPUT:

