

Write a program that takes two inputs as string from the users and performs the following task:-

- First, the program copies the input of string2 to string3 and checks for the string3 ends with 'ide' or not. The program shows true if the string3 ends with 'ide'.
- Further, the program searches char 'a' from string1 and returns the appropriate result.
- Then inserts 'hello' in the string2 at position 5.
- After performing the string manipulations, display all the strings at each level of the manipulation.

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

        string st1 ;

        Console.WriteLine("enter string ");
        st1 = Console.ReadLine();
        int pos=st1.IndexOf('a');

        if (pos==-1)
        {
            Console.WriteLine("doesn't find");
        }
        else
        {
            Console.WriteLine("found at " + pos);
        }

        string stans=st2.Insert(5, "hello");
        Console.WriteLine(stans);

        Console.ReadKey();

    }
}
```

Create a class “student” having two user defined properties to read and write the student name and roll number respectively. Further use these user defined properties to generate 5 students record.

```
class Customer
{
    private int m_id; // field

    private string m_na; // field

    public int ID
    {
        get
        {
            return m_id;
        }
        set
        {
            m_id = value; // value is keyword
        }
    }

    public string Name
    {
        get
        {
            return m_na;
        }
        set
        {
            m_na = value; // value is keyword
        }
    }
}

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

```
Customer []cust = new Customer[5];

for (int i = 0; i < cust.Length; i++)
{
    cust[i]=new Customer();
}

for (int i = 0; i < cust.Length; i++)
{
    Console.WriteLine("enter id");
    cust[i].ID =
Convert.ToInt32(Console.ReadLine());
    Console.WriteLine("enter name");
    cust[i].Name = Console.ReadLine();
}

for (int i = 0; i < cust.Length; i++)
{
    Console.WriteLine("id" + cust[i].ID );
    Console.WriteLine("name" + cust[i].Name);
}
Console.ReadLine();
}
```

Design a webpage with a digital clock showing time and an image control with 4 images randomly get displayed on a page loading event.

Question was not given in part 1

```
<%@ Page Language="C#" AutoEventWireup="true"
CodeFile="Default.aspx.cs" Inherits="_Default" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-
transitional.dtd">

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

            <asp:ScriptManager ID="ScriptManager1"
runat="server">
                </asp:ScriptManager>
                <br />
                <br />
                <asp:UpdatePanel ID="UpdatePanel1" runat="server">
                    <ContentTemplate>
                        <asp:Timer ID="Timer1" runat="server"
Interval="1000" ontick="Timer1_Tick">
                            </asp:Timer>
                        <asp:Image ID="Image1" runat="server"
Height="40px" Width="40px" />
                        <asp:Label ID="Label1" runat="server"
Text="Label"></asp:Label>
                    </ContentTemplate>
                </asp:UpdatePanel>

            </div>
        </form>
    </body>
</html>
```

```
//Note: change interval property of timer control to 1000

public partial class _Default : System.Web.UI.Page
{
    static int i=1;
    protected void Page_Load(object sender, EventArgs e)
    {

    }
    protected void Timer1_Tick(object sender, EventArgs e)
    {
        Label1.Text = DateTime.Now.ToString(); // to display time
        Image1.ImageUrl="~\\image\\"+ i +".jpg";

        i++;
        if (i > 4)
        {
            i = 1;
        }
    }
}
```


[illegible]

```
</body>
</html>

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

    }

protected void RadioButton1_CheckedChanged(object sender,
EventArgs e)
    {
        if (RadioButton1.Checked==true)
        {
            Label1.Font.Size =
Convert.ToInt32(RadioButton1.Text);
        }

    }

    protected void RadioButton2_CheckedChanged(object
sender, EventArgs e)
    {
        if (RadioButton2.Checked == true)
        {
            Label1.Font.Size =
Convert.ToInt32(RadioButton2.Text);
        }
    }

    protected void RadioButton3_CheckedChanged(object
sender, EventArgs e)
    {
        if (RadioButton3.Checked == true)
        {
            Label1.Font.Name = RadioButton3.Text;
        }
    }
}
```



```
    }  
    }  
  
    protected void RadioButton4_CheckedChanged(object  
sender, EventArgs e)  
    {  
        if (RadioButton4.Checked == true)  
        {  
            Label1.Font.Name= RadioButton4.Text;  
        }  
    }  
  
    protected void  
DropDownList1_SelectedIndexChanged(object sender,  
EventArgs e)  
    {  
        Label2.Text ="u have selected" +  
DropDownList1.SelectedItem.ToString() + " " +  
DropDownList1.SelectedValue;  
    }  
}  
}
```

Write 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 in textbox or label once user click on submit. Implement this using web server control

```
<%@ Page Language="C#" AutoEventWireup="true"  
CodeFile="Default2.aspx.cs" Inherits="Default2" %>
```

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"  
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

```
<html xmlns="http://www.w3.org/1999/xhtml">
```

[illegible]

```
<asp:TextBox ID="TextBox3" runat="server"
TextMode="MultiLine"></asp:TextBox>

</div>

</form>

</body>
</html>

public partial class Default2 : System.Web.UI.Page
{
    static string str="";
    protected void Page_Load(object sender, EventArgs
e)
    {

    }

    protected void Button1_Click(object sender,
EventArgs e)
    {
str = str+ TextBox1.Text + " " + TextBox2.Text;
    }

    protected void Button2_Click(object sender,
EventArgs e)
    {
```

```
        TextBox3.Text = str;  
    }  
}
```

Write a C# program to generate the following pattern

```
ABCDEF GFEDCBA
ABCDEF  FEDCBA
ABCDE   EDCBA
ABCD    DCBA
ABC     CBA
AB      BA
A       A
```

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
namespace Pattern
{
    class Program
    {
        static void Main(string[] args)
        {
            int sp=-1,i,j,a=71,k,l;
            for(i=1;i<=7;i++)
            {
                for(j=65;j<=a;j++)
                {
                    /* print A to G */
                    Console.Write((char)j);

```

```
    }  
    for(l=1;l<=sp;l++)  
    {  
        /*leave the spaces */  
        Console.Write(" ");  
    }  
    sp = sp + 2;  
    if(j==72)  
        k = j - 2;  
    else  
        k = j - 1;  
    for(;k>=65;k--)  
    {  
        /* print G to A */  
        Console.Write((char)k);  
    }  
    Console.WriteLine();  
    a = a - 1;  
}  
Console.ReadKey();  
}  
}
```

```
}
```

Create a database “studentmaster” in sql server through visual studio.net and a table “student” in the same database with fields naming “std_Id, std_name, std_add, email, mobile_no”. Assign primary key. Insert four records in the table. Perform the following operations:-

- a. Show selection of record from the above table using connected data access in ADO.NET (DataReader).
- b. Show selection of record from the above table using disconnected data access in ADO.NET (DataAdapter).

Solution

- a. Show selection of record from the above table using connected data access in ADO.NET (DataReader).

Drag and drop grid view control and write code in page load event

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

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



```
// WAP TO DISPLAY DATA FROM TABLE IN CONNECTED MODE
SqlConnection con;
string st=@"Data Source=.\\sqlexpress;Initial Catalog=a1_batch;
Integrated Security=True";
con = new SqlConnection();

con.ConnectionString = st;//1
con.Open();

SqlDataReader dr;
SqlCommand cmd;

string str = "select * from student";

cmd = new SqlCommand(str, con);
dr = cmd.ExecuteReader();

GridView1.DataSource = dr;
GridView1.DataBind();

con.Close();

}
}
```

Show selection of record from the above table using disconnected data access in ADO.NET (DataAdapter).

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data.SqlClient; // for SqlConnection, SqlCommand, SqlDataAdapter
using System.Data; // for DataSet

public partial class AdoDisconnected : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        // diconnected architecture
        SqlConnection Con;
```

```
string st = @"Data Source=.\\sqlexpress;Initial Catalog=a1_batch;Integrated Security=True";
/* ingher use @ which is termed as verbatim string or use escape sequence */
Con = new SqlConnection();
Con.ConnectionString = st;
Con.Open();

SqlDataAdapter da;
SqlCommand cmd;

string str = "select * from student";
cmd = new SqlCommand(str, Con);

da = new SqlDataAdapter(cmd);
DataSet ds = new DataSet();

da.Fill(ds);

//SqlDataAdapter use fill method to fill DataTable or DataSet
// bridge between Database and Dataset
GridView1.DataSource = ds;
GridView1.DataBind();
Con.Close();
}
```

Design a web page to create college ID card with fields namely first name, middle name, last name, class, semester, roll number, address and telephone number, email_Id with proper validation for each field using validation controls. Display the records on a click of a button in a Label. Make a provision to upload the photograph of the candidate.

Validation can be done as per class instruction in lecture, for file upload please refer below small program

Make a provision to upload the photograph of the candidate.

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

      <asp:FileUpload ID="FileUpload1" runat="server" />
      <br />
      <br />
      <asp:Button ID="Button1" runat="server" onclick="Button1_Click" Text="Button" />
    </div>
  </form>
</body>
</html>
```

```
<asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>

</div>
</form>
</body>
</html>
```

Select a file from browse and then click on button , it will be saved / uploaded in c drive.

```
protected void Button1_Click(object sender, EventArgs e)
{
    FileUpload1.SaveAs("C:\\\" + FileUpload1.FileName);

    Label1.Text = "File " + FileUpload1.FileName + " is Uploaded";
}
```

Create a database “employemaster ” in sql server through visual studi o.net . Add a table named “employee” in the same database with fields naming “emp_id, emp_name, emp_dept,emp_add, email_id, mobile_no”. Assign primary key. Insert four records in the table.

Design a web page that allows operations using SqlDataSource and two data bound controls GridView and DropDownList in such a way that the DropDownList should contain all the emp_ids. On selecting any of the emp_id from the DropDownList the corresponding records related to that emp_id must get displayed in the grid view .

Steps

Drag and drop dropdownlist

Select dropdownlist -> click on smart tag->check enable autopostback

Click on choose datasource -> under select data source -> click on new datasource -> select sql database->click on ok->click on new connection button ->server name .\sqlexpress ->select database name -> click on test connection ->click on ok

Now click on next ->click next ->click next as table student is selected by default ->click on finish

So now under select data source sqldatasource1 is selected

Select data field to display and select data field to value are s_rn (any one filed)

Click on finish.

Now drag and drop grid view control -> smart tag ->select choose new data source (don't select sqldatasource1) ->select sql database->click on ok-> do not click on new connection but from dropdown list select last created connection string ->click on next -> right side upper side click on where button -> in column drop down select emp_id (one field which u want to compare) ->

in operator drop down select =

In source drop down select control

In right side parameter properties , control id dropdown

Select dropdownlist1

Click on add button (given right side) click on okay

Click on next

Do not click on test query as it needs value to be given

Click on finish.

Now run - > as ped id selected from dropdownlist , respective record will be displayed.

Write a program to bind dropdownlist with name and display all names in dropdown list.

```
using System;
```

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

```
using System.Linq;
```

```
using System.Web;
```

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

```
using System.Web.UI.WebControls;
```

```
using System.Data.SqlClient;
```

```
public partial class DropDownList : System.Web.UI.Page
```

```
{
```

```
    string st;
```

```
    SqlConnection con;
```

```
    SqlCommand cmd;
```

```
    SqlDataReader dr;
```

```
    protected void Page_Load(object sender, EventArgs e)
```

```
    {
```

```
        con = new SqlConnection();
```

```
        st = @"Data Source=.\sqlexpress;Initial Catalog=tyit18;Integrated Security=True";
```

```
        /* either use @ which is termed as verbatim string or use escape sequence */
```

```
        con.ConnectionString = st;
```

```
        con.Open();
```

```
        string qu;
```

```
        qu = "select s_na from student" ;
```

```
        cmd = new SqlCommand(qu, con);
```

```
dr = cmd.ExecuteReader();

//DropDownList1.DataSource = dr;
//DropDownList1.DataTextField = "s_na";
//DropDownList1.DataBind();

while (dr.Read())
{
    DropDownList1.Items.Add(dr[0].ToString());
}

}
protected void DropDownList1_SelectedIndexChanged(object sender, EventArgs e)
{
    Label1.Text = DropDownList1.SelectedItem.ToString();
}
}
```

Any suggestion whatsapp on 98200 66991

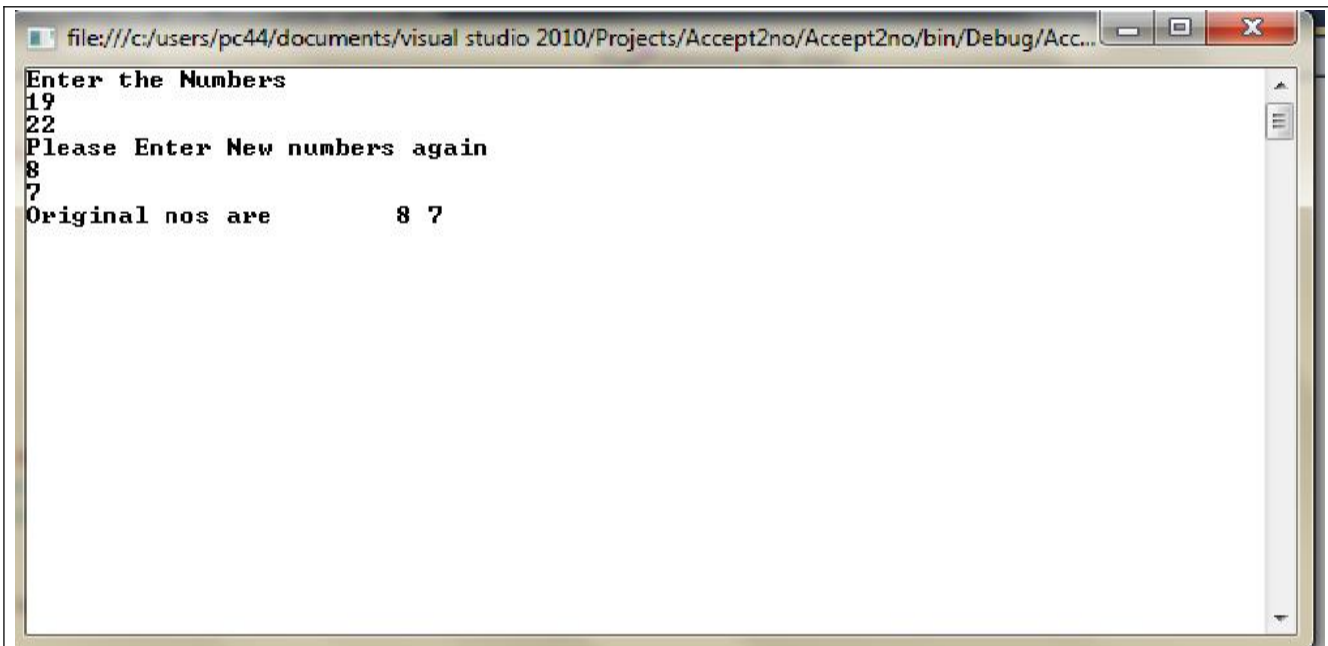
Emial. askpragnesh@rediffmail.com

Solution to all console based program. Web program already sent in ver 1.0

Write an application that includes the logic obtains two numbers from the user, and displays them, but rejects any input where both numbers are greater than 10 and asks for two new numbers.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
namespace ConsoleApplication5
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Enter the Numbers");
            int a = Convert.ToInt32(Console.ReadLine());
            int b = Convert.ToInt32(Console.ReadLine());
            while((a>10)&&(b>10))
            {
                Console.WriteLine("Please Enter New numbers again\t");
                a = Convert.ToInt32(Console.ReadLine());
                b = Convert.ToInt32(Console.ReadLine());
            }
            Console.WriteLine("Original nos are\t"+a+" "+b);
            Console.ReadKey();
        }
    }
}
```

O/p



```
file:///c:/users/pc44/documents/visual studio 2010/Projects/Accept2no/Accept2no/bin/Debug/Acc...
Enter the Numbers
19
22
Please Enter New numbers again
8
7
Original nos are      8 7
```

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

namespace ConsoleApplication1
{
    class Program
    {
        static void Main(string[] args)
        {
            int no;
            Console.WriteLine("enter a no");
            no = Convert.ToInt32(Console.ReadLine());
            reverse(no);
            palindrome(no);
            Console.ReadKey();
        }

        static void reverse(int no)
        {

```

```
int a;
int r=0;

while (no>0)
{
    a = no % 10;
    r = r * 10 + a;
    no = no / 10;
}
Console.WriteLine("reverse no is " + r);
}

static void palindrome(int no)
{

    int a;
    int r = 0;
    int t;
    t = no;

    while (no > 0)
    {
        a = no % 10;
        r = r * 10 + a;
        no = no / 10;
    }

    if (t==r)
    {
        Console.WriteLine(t+"is palindrome");
    }
    else
    {
        Console.WriteLine(t+" is not palindrome " );
    }
}
```



```
    }  
  
    }  
}  
  
using System.Collections.Generic;  
using System.Linq;  
using System.Text;  
namespace fibonnaci  
{  
    class Program  
    {  
        static void Main(string[] args)  
        {  
            int sum=0, f=0, s=1;  
            Console.WriteLine("Enter the limit ");  
            int n = Convert.ToInt32(Console.ReadLine());  
            Console.WriteLine("Fibonnaci Series !");  
            for (inti = 0; i<n; i++)  
            {  
                sum = f + s;  
                f = s;  
                s = sum;  
                Console.WriteLine(s);  
            }  
            Console.ReadLine();  
        }  
    }  
}
```

Exception Handling:

```
using System;  
using System.Collections.Generic;  
using System.Linq;  
using System.Text;  
Namespace Standard_Error_Handling  
{  
    class Program  
    {  
        static void Main(string[] args)  
        {  
            int a = 13,b=0, c;  
            int [] array =new int[2];  
            try  
            {  
                c=a/b;// divide by zero  
                array[2]=c;// array out of bound  
            }  
        }  
    }  
}
```

```
}  
catch(ArithmeticException ae)  
{  
    Console.WriteLine("Arithmetic exception occurred"+ae);  
}  
catch(IndexOutOfRangeException ie)  
{  
    Console.WriteLine(ie);  
}  
finally  
{
```

Pioneer

```
Console.WriteLine("Program completed");  
}  
Console.ReadLine();  
}  
}  
}
```

Q)Write an application that uses two command-line arguments to place values into a string and an integer variable, respectively. Then display these values.

```
using System;  
using System.Collections.Generic;  
using System.Linq;  
using System.Text;  
namespace commandline  
{  
class Program  
{  
static void Main(string[] args)  
{  
if (args.Length != 2)  
{  
Console.WriteLine("Two arguments required.");  
return;  
}  
string param1 = args[0];  
int param2 = Convert.ToInt32(args[1]);  
Console.WriteLine("String parameter: "+param1);  
Console.WriteLine("Integer parameter: "+param2);  
Console.ReadKey();  
}  
}  
}
```

Q)Write 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 Structs

Array of Struct

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
namespace Array_of_Structs
{
    class Program
    {
        public struct student
        {
            public string stuid;
            public string stuname;
            public string coursename;
            public string dob;
        }
        static void Main(string[] args)
        {
            student[] s=new student[2];
            for (inti = 0; i< 2; i++)
            {
                Console.WriteLine("----Enter Student ID-----");
                s[i].stuid = Console.ReadLine(); //define each element of array
                Console.WriteLine("----Enter Student Name----");
                s[i].stuname = Console.ReadLine();
                Console.WriteLine("----Enter Course name-----");
                s[i].coursename = Console.ReadLine();
                Console.WriteLine("-----Enter Date-Of-Birth-----");
                s[i].dob = Console.ReadLine();
            }
            for (int i = 0; i< 2; i++)
            {
                Console.WriteLine("---- Student ID:-----:"+s[i].stuid);
                Console.WriteLine("--- Student Name----:"+s[i].stuname);
                Console.WriteLine("---- Course name-----:"+ s[i].coursename);
                Console.WriteLine("----- Date-Of-Birth-----:"+ s[i].dob);
            }
            Console.ReadKey();
        }
    }
}
```

Write a program to overload constructor overloading in C#

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

namespace ConsoleApplication1
{
    class MyClass
```

```
{
    int a, b;

    public MyClass()
    {
        a = 10;
        b = 20;
    }
    public MyClass(int x, int y)
    {
        a = x;
        b = y;
    }
    public void display()
    {
        Console.WriteLine(a + " " + b);
    }
}

class Program
{
    static void Main(string[] args)
    {
        MyClass ob = new MyClass(); // calling
parameterless contructor
        ob.display();
        MyClass ob1 = new MyClass(100,200); // calling
parameterized constructor
        ob1.display();
        Console.ReadKey();
    }
}
```

```
}  
}
```

Write program in C# to test number entered by user is prime number or not

```
using System;  
using System.Collections.Generic;  
using System.Linq;  
using System.Text;  
  
namespace ConsoleApplication1  
{  
  
    class Program  
    {  
        static void Main(string[] args)  
        {  
            int n;  
            bool flag = true;  
            Console.WriteLine("enter a no");  
            n = Convert.ToInt32(Console.ReadLine());  
  
            for (int i = 2; i <=n-1; i++)  
            {  
                if (n%2==0)  
                {  
                    flag = false;  
                }  
            }  
  
            if (flag==true)  
            {
```

```
        Console.WriteLine(n+ "is prime");
    }
    else
    {
        Console.WriteLine(n+"is not prime");
    }
    Console.ReadKey();
}

}
```

Write a program to reverse a number and find sum of digits of a number.

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

namespace ConsoleApplication1
{
    class Program
    {
        static void Main(string[] args)
        {
            int n;
            int a,s;
            s = 0;
            Console.WriteLine("enter a no");
            n = Convert.ToInt32(Console.ReadLine());
```

```
while (n > 0)
{
    a = n % 10;
    s = s + a;
    n = n / 10;
}
Console.WriteLine("sum of digit is " + s);

Console.ReadKey();

}

}
```


Advanced Web Programming

Solution to most common programs

1. Create a XML document for student database and apply the style sheet effects and display on webpage. 20

How to read and write xml file.

Right click on website , add new item , add xml file

Name XMLFile.xml

XMLFile.xml

Write following data in file.

```
<student>
  <name>hello</name>
  <rollno>112</rollno>

</student>
```

```
<%@ Page Language="C#" AutoEventWireup="true"
CodeFile="Default2.aspx.cs" Inherits="Default2" %>
```

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0
Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-
transitional.dtd">
```

```
<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="Read" />
```

```
            <br />
```

```
            <asp:Label ID="Label1" runat="server"
Text="Label"></asp:Label>
```

```
            <br />
```

```
<br />
student details
<br />
<br />
<asp:Button ID="Button2" runat="server"
onclick="Button2_Click" Text="write" />
<br />
<br />
name<asp:TextBox ID="TextBox1"
runat="server"></asp:TextBox>
<br />
<br />
roll no<asp:TextBox ID="TextBox2"
runat="server"></asp:TextBox>
<br />
<br />
<br />
<br />

</div>
</form>
</body>
</html>
```

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

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

    }

    protected void Button1_Click(object sender,
EventArgs e) // for reading xml file
    {

        string path =
Server.MapPath("~/XMLFile.xml");

        XmlReader xr = XmlReader.Create(path);
```

```
string st = "";

while (xr.Read())
{

    if (xr.NodeType.Equals(XmlNodeType.Text))
    {
        st = st + xr.Value + "<br>" ;
    }

}

Label1.Text = st;
xr.Close();

}
```

```
protected void Button2_Click(object sender,
EventArgs e) // for write
{
```

```
XmlDocument x = new XmlDocument();

x.Load(Server.MapPath("~/XMLFile.xml"));

XmlElement p = x.CreateElement("student");

XmlElement xna = x.CreateElement("name");

xna.InnerText = TextBox1.Text;

XmlElement xrn = x.CreateElement("rollno");

xrn.InnerText = TextBox2.Text;

p.AppendChild(xna);
p.AppendChild(xrn);

x.DocumentElement.AppendChild(p);

x.Save(Server.MapPath("~/XMLFile.xml"));
Response.Write("Record inserted in file ");

}
```

}

2. Create a simple web page containing the student details (RollNo, Name, Class, Phone, Email). Write a program to store the data in the database and retrieve it using Data reader in tabular format. 20

Refer connected architecture program in class note

3. Viva 5

4. Journal 5

1. Create a simple web page with various sever controls to demonstrate setting and use of their properties. (Example : AutoPostBack)

1. On click of a button control display the selected items from the listbox in a textbox. Also in the same webpage display the name of the selected item from the DropDownList1 in a label. Also change the font size of the same label according to the font size selected from the Dropdownlist2.

2. Display Image control for photo.

3. Check Boxes provides special formatting (viz. underline, bold, italic) and Radio Buttons provides color for label.

4. Use of AutoPostBack property. 20

2. Create a simple web page to count the number of times the current webpage is submitted to the server onclick event of a Button. 20

In solun exp add Global.asax

```
<%@ Application Language="C#" %>
```

```
<script runat="server">
```

```
void Application_Start(object sender, EventArgs  
e)
```

```
{
```

```
    // Code that runs on application startup
```

```
    Application["x"] = 0;
```

```
}
```

```
void Application_End(object sender, EventArgs e)
```

```
{
```

```
    // Code that runs on application shutdown
```

```
}
```

```
void Application_Error(object sender, EventArgs  
e)
```

```
{
```

```
    // Code that runs when an unhandled error  
occurs
```



```
}
```

```
void Session_Start(object sender, EventArgs e)
```

```
{
```

```
    // Code that runs when a new session is  
started
```

```
}
```

```
void Session_End(object sender, EventArgs e)
```

```
{
```

```
    // Code that runs when a session ends.
```

```
    // Note: The Session_End event is raised  
only when the sessionstate mode
```

```
    // is set to InProc in the Web.config file.  
If session mode is set to StateServer
```

```
    // or SQLServer, the event is not raised.
```

```
}
```

```
</script>
```

```

protected void Button1_Click(object sender,
EventArgs e)
{

    Application["x"] =
Convert.ToInt32(Application["x"]) + 1;

    //count++;

    Label1.Text = "web page submitted " +
Application["x"].ToString();

}

```

3. Viva 5

4. Journal 5

1. Create simple application to perform following operations

i. Finding factorial Value

ii. Money Conversion

iii. Cube of given number

iv. Generate Fibonacci series 20

Li usd to indian rupees

2. Demonstrate the use of Calendar control to perform following operations.

- a) Display messages in a calendar control
 - b) Display vacation in a calendar control
 - c) Selected day in a calendar control using style
 - d) Difference between two calendar dates 20
3. Viva 5
4. Journal 5

<div>

```
        <asp:Calendar ID="c1" runat="server"
OnSelectionChanged="c1_SelectionChanged"></asp:Calen
dar>
```

```
    <br />
```

```
        <asp:Label ID="L1" runat="server"
Text="Label"></asp:Label>
```

```
    <br />
```

```
        <asp:Label ID="L2" runat="server"
Text="Label"></asp:Label>
```

```
    <br />
```

```
        <asp:Label ID="L3" runat="server"
Text="Label"></asp:Label>
```

```
    <br />
```

```
        <asp:Label ID="L4" runat="server"
Text="Label"></asp:Label>
```

```
    <br />
```

```
        <asp:Label ID="L5" runat="server"
Text="Label"></asp:Label>
```

```
    <br />
```

[illegible]

```
public partial class _Default : System.Web.UI.Page
{
    protected void btnResult_Click(object sender,
EventArgs e)
    {
        c1.Caption = "TY BSc IT";

        L2.Text = "Today's Date:" +
c1.TodaysDate.ToShortDateString();

        L3.Text = "Diwali Vacation Start: 11-3-2018";

        TimeSpan d = new DateTime(2018, 11, 3) -
DateTime.Now;

        L4.Text = "Days Remaining for vacation: " +
d.Days.ToString();
    }
}
```

```
protected void c1_SelectionChanged(object sender,
EventArgs e)
{
    L1.Text = "Your selected Date:" +
c1.SelectedDate.ToShortDateString();

    var d = c1.SelectedDate - c1.TodaysDate;
    L1.Text += " total days left" +
d.Days.ToString();
}

protected void btnReset_Click(object sender,
EventArgs e)
{
    L1.Text = " ";
    L2.Text = " ";
    L3.Text = " ";
    L4.Text = " ";
    L5.Text = " ";
    c1.SelectedDates.Clear();
}
}
```

1. Create Web Form to demonstrate use of User Control. Create footer named user control having copyright reserved (ex. "©company name") and use it in a webpage. 20

Take empty website , in solution explorer right click on website ->add new item- >select **Web User Control (extension is ascx) from list**

Name as Footer.ascx

Will open following code

```
<%@ Control Language="C#" AutoEventWireup="true"
CodeFile="Footer1.ascx.cs" Inherits="Footer1" %>
```

Now add one label in ascx page

```
<asp:Label ID="lblf" runat="server" ForeColor="Blue"
></asp:Label>
```

Design complete

Now write code in Footer.ascx.cs file

```
protected void Page_Load(object sender, EventArgs e)
{
    lblf.Text = "Copy right by Microsoft corporation";
}
```

Code is complete

Now implement in Default.aspx page

In solution explorer right click on website ->add new item ->select Web Form from list

Now add following line to register control on top of page in Default.aspx file as follows

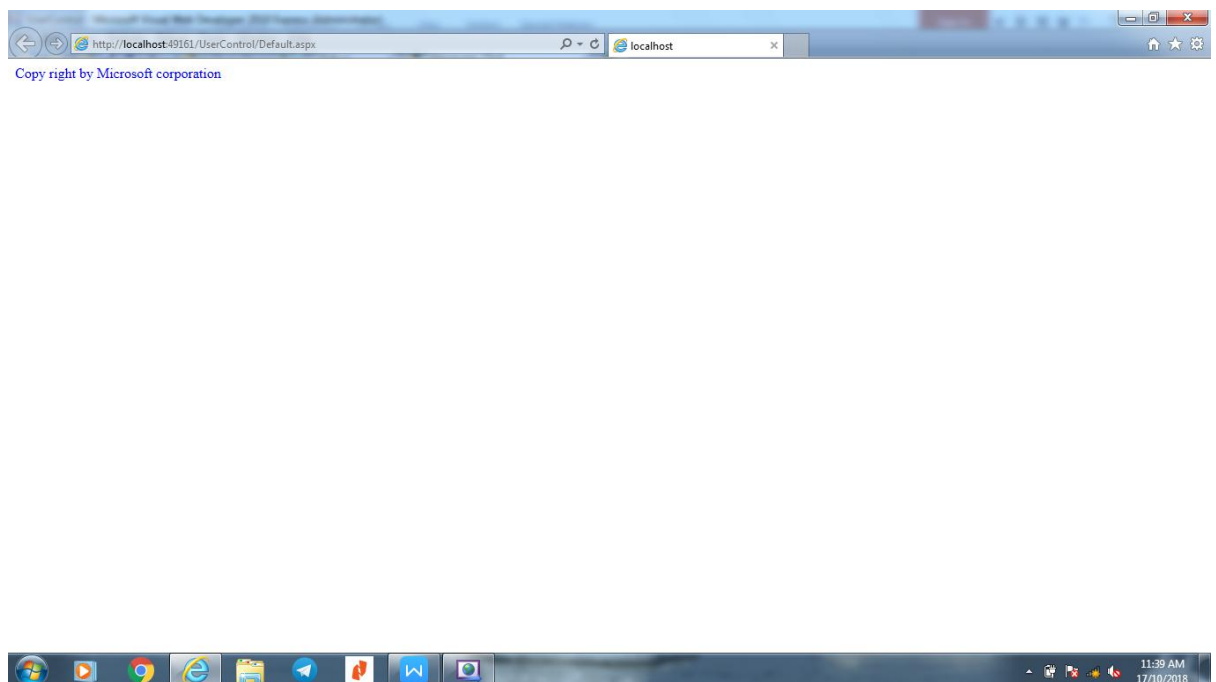
```
<%@ Register TagPrefix="Asp" TagName="Footer"  
Src="~/Footer.ascx" %>
```

Now you can use your new control created with tag name Footer under <Div> </Div> as follows

```
<div>  
    Asp:Footer id="f1" runat="server"></Asp:Footer>  
</div>
```

```
<Asp:Footer id="f1" runat="server"></Asp:Footer>
```

Save your file and run . it will display following output



2. Create Web Form to demonstrate use of Ad rotator Control with five advertisements. Also demonstrate how keyword filter works. 20

Add new item as XML file and add following code in file

The following code illustrates an advertisement file XMLfile.xml:

<Advertisements>

<Ad>

<ImageUrl>Desert.jpg</ImageUrl>

<NavigateUrl>www.Desert.com</NavigateUrl>

<AlternateText>book desert show</AlternateText>

<Impressions>5</Impressions>

<Keyword>desert </Keyword>

</Ad>

<Ad>

<ImageUrl>Koala.jpg</ImageUrl>

<NavigateUrl>www.Koala.com</NavigateUrl>

<AlternateText>book desert show</AlternateText>

<Impressions>5</Impressions>

<Keyword>desert </Keyword>

</Ad>

</Advertisements>

Warning all Tags begins with Capital letter and if spelling mistake then no out put no error

All tags must finish in same line like

<AlternateText>book desert show</AlternateText>

~~Not as follows~~

<AlternateText>book desert show

</AlternateText>

Now add adrotator and change following properties of ad rotator

Height =60

Width=600

AdvertisementFile - > select name of XML file you have created.

Run

To change image Refresh so it will display . in impressions of xml file use different number , like 1 , 5 , 7 etc. More impressions means it will display more time as compare to other.

3. Viva 5

4. Journal 5

1. Create XML file employees with nodes (eid, ename, edept, salary).

Bind the eid and ename to a dropdownlist and the ename should be

in the ascending order. 20 (pending)

Create xml file

```
<?xml version="1.0" encoding="utf-8" ?>
```

```
<employees>
```

```
    <emp>
```

```
<eid>1</eid>
<ename>first</ename>
<dept>IT</dept>
<salary>20000</salary>
</emp>
```

```
<emp>
  <eid>2</eid>
  <ename>second</ename>
  <dept>CS</dept>
  <salary>19000</salary>
</emp>
```

```
<emp>
  <eid>3</eid>
  <ename>abc</ename>
  <dept>HR</dept>
  <salary>15000</salary>
</emp>
```

```
</employees>
```

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

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

        if (!IsPostBack)
        {

            string filePath =
Server.MapPath("~/XMLFile.xml");

            DataSet ds = new DataSet();

            ds.ReadXml(filePath);

            DropDownList1.DataSource = ds;
```

```

        DropDownList1.DataTextField = "ename";
        DropDownList1.DataValueField = "eid";
        DropDownList1.DataBind();

    }
}

```

```

protected void
DropDownList1_SelectedIndexChanged(object sender,
EventArgs e)
{
    Response.Write("u have selected text" +
DropDownList1.SelectedItem + "<br>");

    Response.Write("u have selected id " +
DropDownList1.SelectedValue);
}
}

```

Sorting

2. Create simple web page that takes a number as input and display it four times in a row (separated by blank spaces), and then four times in the next row, with no separation.

Like-

Enter a digit: 22

Expected Output:

22 22 22 22

22222222

22 22 22 22

22222222

...

20

```
<div>
```

```
    enter a no
```

```
        <asp:TextBox ID="TextBox1"
runat="server"></asp:TextBox>
```

```
        <br />
```

```
        <br />
```

```
        <asp:TextBox ID="TextBox2" runat="server"
Height="88px" TextMode="MultiLine"
        Width="208px"></asp:TextBox>
```

```
        <br />
```

```
        <br />
```

```
        <asp:Button ID="Button1" runat="server"
onclick="Button1_Click" Text="Button" />
```

```
</div>
```

Default.aspx.cs

```
using System;
```

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

public partial class Default2 : System.Web.UI.Page
{
    protected void Page_Load(object sender,
EventArgs e)
    {

    }

    protected void Button1_Click(object sender,
EventArgs e)
    {
        int n = Convert.ToInt32(TextBox1.Text);
        for (int i = 1; i <= 2; i++)
        {
            for (int j = 1; j<=4; j++)
            {
                if (i == 1)
                {
```

```

        TextBox2.Text = TextBox2.Text + n + " ";
    }
    else
    {
        TextBox2.Text = TextBox2.Text + n ;
    }

}
TextBox2.Text = TextBox2.Text + "\n";
}
}
}

```

3. Viva 5

4. Journal 5

1. Create a simple web page to display the Date properties (year, month, day, hour, minute, second, millisecond etc.) as well as to display the number of days of the year between two specified years. 20

from date

```
<asp:TextBox ID="txtfrom"
runat="server"></asp:TextBox>
```

```
<br />
```

```
<br />
```

to date

```
<asp:TextBox ID="txtto"
runat="server"></asp:TextBox>
```

```
<br />
```

```
<br />
```

```
<br />
```

```
<asp:Button ID="Button1" runat="server"
onclick="Button1_Click" Text="Button" />
```

```
<br />
```

```
<br />
```

```
<br />
```

```
<br />
```

```
<asp:TextBox ID="TextBox3" runat="server"
Height="118px" TextMode="MultiLine"
```

```
Width="176px"></asp:TextBox>
```

```
protected void Button1_Click(object sender,
EventArgs e)
{
    DateTime FromYear = Convert.ToDateTime(txtfrom.Text);
    DateTime ToYear = Convert.ToDateTime(txtto.Text);

    //Creating object of TimeSpan Class
    TimeSpan objTimeSpan = ToYear - FromYear;

    //years
    int Years = ToYear.Year - FromYear.Year;

    //months
    int month = ToYear.Month - FromYear.Month;

    //TotalDays
    double Days =
    Convert.ToDouble(objTimeSpan.TotalDays);

    //Total Months
    int TotalMonths = (Years * 12) + month;

    //Total Hours
    double TotalHours = objTimeSpan.TotalHours;

    //Total Minutes
    double TotalMinutes = objTimeSpan.TotalMinutes;

    //Total Seconds
    double TotalSeconds = objTimeSpan.TotalSeconds;
```

```

        //Total Mile Seconds

double TotalMileSeconds =
objTimeSpan.TotalMilliseconds;

        //Assining values to td tags

TextBox3.Text = Years + "   Year   " + month + "
Months" + "\n";

TextBox3.Text += "Total months "
+Convert.ToString(TotalMonths) + "\n";

TextBox3.Text += "Total Days "
+Convert.ToString(Days) + "\n";

TextBox3.Text += "Total Hours " +
Convert.ToString(TotalHours) + "\n";

TextBox3.Text += "Total Minutes" +
Convert.ToString(TotalMinutes) + "\n";

    TextBox3.Text += "Total Seconds" +
Convert.ToString(TotalSeconds) + "\n";

TextBox3.Text += "Total Miliseconds" +
Convert.ToString(TotalMileSeconds) + "\n";

    }

```

2. Create a web page containing the student details (RollNo, Name, Class, Phone, Email) and show result using Databinding and dropdownlist control. 20

Steps

Drag and drop dropdownlist

Select dropdownlist -> click on smart tag->check enable autopostback

Click on choose datasource -> under select data source -> click on new datasource -> select sql

database->click on ok->click on new connection button ->server name .\sqlexpress ->select database

name -> click on test connection ->click on ok

Now click on next ->click next ->click next as table student is selected by default

->click on finish

So now under select data source sqldatasource1 is selected

Select data field to display and select data field to value are s_rn (any one filed)

Click on finish.

Now drag and drop grid view control -> smart tag ->select choose new data source (don't select

sqldatasource1) ->select sql database->click on ok-> do not click on new connection but from dropdown

list select last created connection string ->click on next -> right side upper side click on where button ->

in column drop down select emp_id (one field which u want to compare) ->

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in operator drop down select =

In source drop down select control

In right side parameter properties , control id dropdown

Select dropdownlist1

Click on add button (given right side) click on okay

Click on next

Do not click on test query as it needs value to be given

Click on finish.

Now run - > as ped id selected from dropdownlist , respective record will be displayed.

3. Viva 5

4. Journal 5

1. Create a simple web page to demonstrate all string operations. 20

Refer console application solution 2.0

2. Design an asp.net webpage with 2 groups of Radio Buttons, DropDownList, label and TextBox to perform the following operations:-

1. On click of Radio Buttons each at the same time from two different groups, change the font-size and font-face of the label's Text.

2. Also on the same webpage show that, on selecting a country name from the dropdown list, its respective country code gets displayed in a textbox. 20

Refer Ver 1.0 / 2.0

3. Viva 5

4. Journal 5

1. Create a delegate del1. Create display1() and display2() static methods. Create a simple application to call these two methods by the through the delegate. 20

2. Create a simple web page to show how to write and read a cookie from a client's computer. 20

3. Viva 5

4. Journal 5

1. Create a web application to demonstrate use of HtmlEditorExtender

Ajax control. 20

2. Create a web application to demonstrate use of Master Page with

applying Styles and Themes for page beautification. 20

Steps to perform Exercise on Theme and skin

in solution explorer -> right click add ASP.NET Folder ->click Theme
it will create app_themes folder and subfolder, give subfolder name as Theme1
now right click on theme1 folder ->add new item ->select skin file and add

now add coding as follows

```
<asp:Label runat="server" ForeColor ="Green" SkinID="lbltxt" Text ="Label" ></asp:Label>
```

```
<asp:TextBox runat="server" ForeColor= "yellow" SkinID="txt" Text ="Label" ></asp:TextBox>  
<asp:Button runat ="server" ForeColor ="DeepSkyBlue" SkinID ="btn" />
```

do not give id as it is generic not specific

now in solution explorer right click on website ->add new item ->web form
Default.aspx

how to apply theme to page,

in source

@page add one attribute Theme="Theme1"

```
<%@ Page Language="C#" AutoEventWireup="true"  
Theme="Theme1" CodeFile="Default.aspx.cs"  
Inherits="_Default" %>
```

now you can use any skin id in your control

```
<div>
    <asp:Label ID="Label1" SkinID="lbltxt" runat="server" Text="Label"></asp:Label>
    <asp:Button ID="Button1" SkinID="btn" runat="server" Text="Button" />
    <asp:TextBox ID="TextBox1" SkinID="txt" runat="server"></asp:TextBox>
</div>
```

now run
you will get effect in control.

3. Viva 5

4. Journal 5

1. Create a web applications to demonstrate Form Security and
Windows Security with proper Authentication and Authorization
properties. 20

2. Create a web application to demonstrate GridView paging and
Creating own table format using GridView. 20

3. Viva 5

4. Journal 5

1. Create a web application to bind data in a multiline textbox by
querying in another textbox. 20

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

```
using System.Web.UI.WebControls;
using System.Data.SqlClient;

public partial class Default2 : System.Web.UI.Page
{
    protected void Page_Load(object sender,
EventArgs e)
    {

    }

    protected void Button1_Click(object sender,
EventArgs e)
    {
        string st;
        SqlConnection con;
        SqlCommand cmd;
        SqlDataReader dr;
        con = new SqlConnection();
        st = @"Data Source=.\sqlexpress;Initial
Catalog=tyit18;Integrated Security=True";
        /* either use @ which is termed as verbatim string
or use escape sequence */
        con.ConnectionString = st;
        con.Open();
    }
}
```



```

string qu;
qu = "select * from student" ;
cmd = new SqlCommand(qu, con);

dr = cmd.ExecuteReader();

while (dr.Read())
{
    TextBox1.Text =TextBox1.Text + (dr[0].ToString()) +
    " " + dr[1].ToString() + " " + dr[2].ToString() +
    "\n";

}

}

    }

```

2. Write a program to create a DLL to print a factorial of a number. 20

Write a program to create DLL file and use it.

Create a class Arith and method name add(int a, int b) to return addition of two numbers.

Open console appliction

File _> new project ->Select ClassLibrary ->click ok

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

namespace ClassLibrary1
{
    public class Class1
    {
    }
}
```

Modify above code as below

```
namespace TYBscIT
{
    public class Arith
    {
```

```

        public int add(int a, int b)
        {
            return a + b;
        }
    }
}

```

Click on debug->build solution to creat DLL

File DLL is created in folder bin

Now File -> new project-> select Console Application

In solution explorer ->console application1-> click on references folder->right click on references ->add reference ->select your folder where dll is saved (in bin folder) which will add ClassLibrary1

Now add namespace in top

using TYBscIT;

So finally code will be as follows

```

using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using TYBscIT;
namespace ConsoleApplication2
{

```

```

class Program
{
    static void Main(string[] args)
    {
        TYBscIT.Arith ob = new TYBscIT.Arith();
        int z=ob.add(5, 7);
        Console.WriteLine("addition is "+ z);
        Console.ReadKey();
    }
}

```

3. Viva 5

4. Journal 5

1. Write an Application to:

1. Generate Fibonacci series

2. Test for prime numbers

3. Test for vowels

4. Reverse a number 20

2. Create a table with records and retrieve those using Disconnected

data access in a Gridview. 20

3. Viva 5

4. Journal 5

1. Create a simple web page to demonstrate use of built in DivideByZeroException and IndexOutOfRangeException exceptions using textbox and label control. 20

```
protected void Button1_Click(object sender,
EventArgs e)
{
    try
    {
        int a, b;
        a = Convert.ToInt32(TextBox1.Text);
        b = Convert.ToInt32(TextBox2.Text);
        int c = a / b;
        Label1.Text = c.ToString();
    }
    catch (DivideByZeroException db)
    {
        Label1.Text = "can't divide by zero";
    }
}
```

```
protected void Button2_Click(object sender,
EventArgs e)
{
    try
    {
        int[] a = { 6, 7 };
        Label11.Text = a[2].ToString();

    }
    catch (IndexOutOfRangeException io)
    {
        Label11.Text = "out of range";
    }
}
```

```
enter no 1     
<asp:TextBox ID="TextBox1"
runat="server"></asp:TextBox>
<br />
```

[illegible]

2. Create a simple web page to show data in Tree view control and datalist using web. Sitemap file containing navigation information. 20

3. Viva 5

4. Journal 5

1. Display the no. of visitors on a given web page. 20

2. Create a registration form having text fields for accepting, Name, Age, Email, Address and Mobile number. Perform the following validations for the same:

1. All fields need to be filled compulsorily

2. Name should contain only alphabets and should not be more than 25 characters long

3. Validate email and mobile number appropriately

4. Age should be between 18 and 32 only.

Include submit and cancel buttons. On click of submit button, open a new page and display all the information entered by the user and on click of cancel button, all text fields should be cleared. 20

Solution validation done in class

In cancel button causes validation set to false in property window.

Use Application state management to display in next page

3. Viva 5

4. Journal 5

1. Create a webpage with multiline textbox and two buttons, viz. saveContents and loadContents. On click of saveContents button, contents from the textbox should be retained and on click of loadContents button, the previously saved contents should be displayed back on the textbox. 20
2. Store 3 objects of the furniture class having 3 data members (name, manufacturer, and cost) in 3 session objects. Display a panel to include a listbox displaying the names of all three furniture objects, and a button named “MoreInformation”. On click of the button retrieve the selected object (from listbox) information and display it in a label. 20
3. Viva 5
4. Journal 5

1. Write a program in C# to demonstrate multiple inheritance using interfaces. 20
2. Create a table with records and retrieve those using Disconnected data access in a Gridview. 20
3. Viva 5
4. Journal 5