PRACTICAL 1 :

A] Create an application to print on screen the output of adding , subtracting , multiplying and dividing two numbers entered by the user in C#.

```
using System;
public class practical1A
{
   public static void Main(string[] args)
   {
      Console.Write("Enter the first number: ");
      double num1 = Convert.ToDouble(Console.ReadLine());
      Console.Write("Enter the second number: ");
      double num2 = Convert.ToDouble(Console.ReadLine());
      Console.WriteLine("\nResults:");
      Console.WriteLine($"{num1} + {num2} = {num1+num2}");
      Console.WriteLine($"{num1} - {num2} = {num1-num2}");
      Console.WriteLine($"{num1} * {num2} = {num1*num2}");
      Console.WriteLine($"{num1} / {num2} = {num1/num2}");
   }
}
```

OUTPUT :

```
Enter the first number: 10
Enter the second number: 2
Results:
10 + 2 = 12
10 - 2 = 8
10 * 2 = 20
10 / 2 = 5
```

B] Create an application to print Floyd's triangle till n rows in C#.

```
using System;
public class practical1A
{
   public static void Main(string[] args)
   {
      Console.Write("Enter the number of rows for Floyd's triangle: ");
      int count = 0;
      int n = Convert.ToInt32(Console.ReadLine());
      for(int i=0;i<n;i++)
      {
         for(int j=0;j<=i;j++)
```

```
        {
           Console.Write(count++);
        }
        Console.WriteLine();
      } }
}
```

OUTPUT :

```
Enter the number of rows for Floyd's triangle: 5
0
1 2
3 4 5
6 7 8 9
10 11 12 13 14
```

C] Create an application to demonstrate following operations i. Generate Fibonacci series. ii. Test for prime numbers.

```
using System;
public class practical1A
{
   public static void Main(string[] args)
   {
      Console.Write("Enter the number of terms for Fibonacci series: ");
      int n = Convert.ToInt32(Console.ReadLine());
      int f = 0;
      int s = 1;
      Console.Write(f);
      Console.Write(" "+s);
      for(int i =2;i<n;i++)
      {
         int sum = f + s;
         Console.Write(" "+sum);
         f=s;
         s =sum;
      }

   }
}
```

OUTPUT :

```
Enter the number of terms for Fibonacci series: 6
0 1 1 2 3 5
```

PRACTICAL 2 :

A] Create a simple application to demonstrate the concepts boxing and unboxing.

```
using System;
public class HelloWorld
{
   public static void Main(string[] args)
   {
      int value1 = 10;
      double value2 = 10.40;

      object boxing1 = value1;
      object boxing2 = value2;

      int unboxing1 = (int)boxing1;
      double unboxing2 = (double)boxing2;

      Console.WriteLine("Boxing Value 1: " + boxing1);
      Console.WriteLine("Boxing Value 2: " + boxing2);
      Console.WriteLine("Unboxing Value 1: " + unboxing1);
      Console.WriteLine("Unboxing Value 2: " + unboxing2);
   }
}
```

OUTPUT :

```
Boxing Value 1: 10
Boxing Value 2: 10.4
Unboxing Value 1: 10
Unboxing Value 2: 10.4
```

B] Create a simple application to perform addition and subtraction using delegate.

```
using System;

public class HelloWorld
{
   public delegate void Operation(int a, int b);
   public static void Main(string[] args)
   {
      Console.Write("Enter the first number: ");
      int num1 = Convert.ToInt32(Console.ReadLine());
```

```
        Console.Write("Enter the second number: ");
        int num2 = Convert.ToInt32(Console.ReadLine());

        Operation obj1 = add;
        Operation obj2 = sub;
        obj1(num1,num2);
        obj2(num1,num2);

    }
    public static void add(int a,int b)
    {
        Console.WriteLine("Addition : "+(a+b));
    }
    public static void sub(int a,int b)
    {
        Console.WriteLine("Substraction : "+(a-b));
    }
}
```

OUTPUT :

```
Enter the first number: 5
Enter the second number: 3
Addition : 8
Substraction : 2
```

C] Create a simple application to demonstrate use of the concepts of interfaces.

```
using System;
interface I1
{
    void addition(int a,int b);
}
interface I2
{
    void subtraction(int a, int b);
}
public class Cal:I1,I2
{
    public void addition(int a,int b)
    {
        Console.WriteLine("Addition : "+(a+b));
    }
    public void subtraction(int a, int b)
    {
```

```
        Console.WriteLine("Subtraction : "+(a-b));
    }
}

public class Program
{
    public static void Main(string[] args)
    {
        Cal obj = new Cal();
        obj.addition(10,20);
        obj.subtraction(20,10);
    }
}
```

OUTPUT :

```
Addition : 30
Subtraction : 10
```

PRACTICAL 3 :

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

practical3A.aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
  Inherits="AWP_practicals_1.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:DropDownList ID="dropdownlist1" runat="server" AutoPostBack="true"
  OnSelectedIndexChanged="dropdownlist1_SelectedIndexChanged">
            <asp:ListItem Value="400709">Koparkhairne</asp:ListItem>
            <asp:ListItem Value="400701">Vashi</asp:ListItem>
            <asp:ListItem Value="400710">Ghansoli</asp:ListItem>
         </asp:DropDownList>
         <asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
         <asp:RadioButtonList ID="RadioButtonList1" runat="server"
  OnSelectedIndexChanged="RadioButtonList1_SelectedIndexChanged"
  AutoPostBack="true">
            <asp:ListItem Text ="Red" Value="Red"></asp:ListItem>
            <asp:ListItem Text ="Pink" Value="Pink"></asp:ListItem>
            <asp:ListItem Text ="Yellow" Value="Yellow"></asp:ListItem>
            <asp:ListItem Text ="Blue" Value="Blue"></asp:ListItem>
         </asp:RadioButtonList>
         <asp:RadioButtonList ID="RadioButtonList2" runat="server"
  OnSelectedIndexChanged="RadioButtonList2_SelectedIndexChanged" AutoPostBack="true">
            <asp:ListItem > Times New Roman</asp:ListItem>
            <asp:ListItem >Jokerman</asp:ListItem>
            <asp:ListItem >Arial</asp:ListItem>
         </asp:RadioButtonList>
         <asp:RadioButtonList ID="RadioButtonList3" AutoPostBack="true" runat="server"
  OnSelectedIndexChanged="RadioButtonList3_SelectedIndexChanged">
            <asp:ListItem > Small</asp:ListItem>
            <asp:ListItem >Medium</asp:ListItem>
            <asp:ListItem >Large</asp:ListItem>
```

```
            <asp:ListItem >XLarge</asp:ListItem>
        </asp:RadioButtonList>

            <asp:CheckBox ID="CheckBox1" AutoPostBack="true"  Text="Bold" runat="server"
  OnCheckedChanged="CheckBox1_CheckedChanged" />
            <asp:CheckBox ID="CheckBox2"  AutoPostBack="true" Text="Underline"
  runat="server" OnCheckedChanged="CheckBox2_CheckedChanged" />
            <asp:CheckBox ID="CheckBox3" AutoPostBack="true" Text="Italic" runat="server"
  OnCheckedChanged="CheckBox3_CheckedChanged" />

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

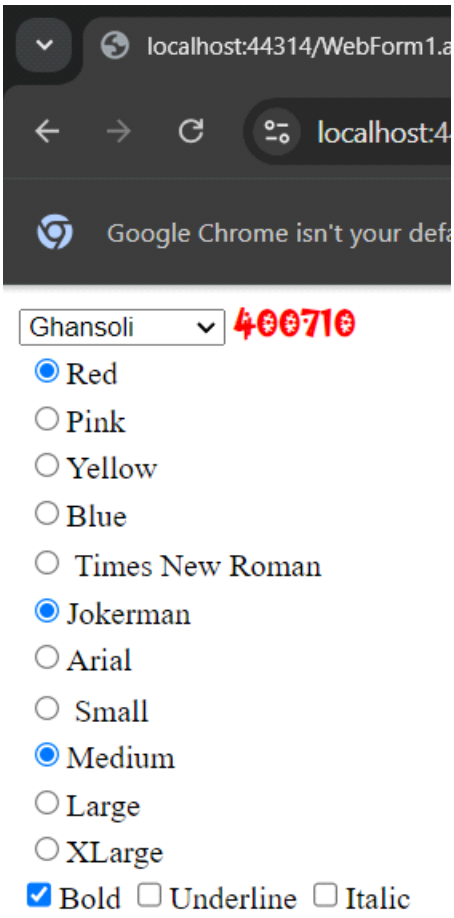
practical3A.aspx.cs:

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

namespace AWP_practicals_1
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }

      protected void dropdownlist1_SelectedIndexChanged(object sender, EventArgs e)
      {
         Label1.Text = dropdownlist1.SelectedValue;
      }

      protected void RadioButtonList1_SelectedIndexChanged(object sender, EventArgs e)
      {
         if (RadioButtonList1.SelectedIndex == 0)
         {
            Label1.ForeColor = System.Drawing.Color.Red;
         }
         if (RadioButtonList1.SelectedIndex == 1)
         {
```

```
        Label1.ForeColor = System.Drawing.Color.Pink;

    }
    if (RadioButtonList1.SelectedIndex == 2)
    {
        Label1.ForeColor = System.Drawing.Color.Yellow;

    }
    if (RadioButtonList1.SelectedIndex == 3)
    {
        Label1.ForeColor = System.Drawing.Color.Blue;

    }

}

protected void RadioButtonList2_SelectedIndexChanged(object sender, EventArgs e)
{
    Label1.Font.Name = RadioButtonList2.SelectedValue;
}

protected void RadioButtonList3_SelectedIndexChanged(object sender, EventArgs e)
{
    if (RadioButtonList3.SelectedIndex == 0)
    {
        Label1.Font.Size = FontUnit.Small;
    }
    if (RadioButtonList3.SelectedIndex == 1)
    {
        Label1.Font.Size = FontUnit.Medium;
    }
    if (RadioButtonList3.SelectedIndex == 2)
    {
        Label1.Font.Size = FontUnit.Large;
    }
    if (RadioButtonList3.SelectedIndex == 3)
    {
        Label1.Font.Size = FontUnit.XLarge;
    }

}

protected void CheckBox1_CheckedChanged(object sender, EventArgs e)
{
    if (CheckBox1.Checked)
    {
```

```
            Label1.Font.Bold = true;
        }
        else
        {
            Label1.Font.Bold = false;
        }

    }

    protected void CheckBox2_CheckedChanged(object sender, EventArgs e)
    {
        if (CheckBox2.Checked)
        {
            Label1.Font.Underline = true;
        }
        else
        {
            Label1.Font.Underline = false;
        }

    }

    protected void CheckBox3_CheckedChanged(object sender, EventArgs e)
    {
        if (CheckBox3.Checked)
        {
            Label1.Font.Italic = true;
        }
        else
        {
            Label1.Font.Italic = false;
        }

    }
  }
}
```

OUTPUT :



B] Create a simple application to demonstrate your vacation using calendar control.

practical3B.aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Practical3B.aspx.cs"
  Inherits="AWP_project.Practical3B" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
         <asp:Calendar ID="Calendar1" runat="server" OnDayRender="Calendar1_DayRender"
  OnSelectionChanged="Calendar1_SelectionChanged"></asp:Calendar>
```

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

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

practical3B.aspx.cs:

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

namespace AWP_project
{
  public partial class Practical3B : System.Web.UI.Page
  {
    protected void Page_Load(object sender, EventArgs e)
    {
    }
    protected void Calendar1_SelectionChanged(object sender, EventArgs e)
    {
      Response.Write(Calendar1.SelectedDate.ToLongDateString());

    }
    protected void Calendar1_DayRender(object sender, DayRenderEventArgs e)
    {
      if (e.Day.Date.Day == 19 && e.Day.Date.Month == 9)
      {
        Label obj = new Label();
        obj.Text = "BON DAY";
        e.Cell.Controls.Add(obj);
      }
      DateTime t1 = new DateTime(2024, 09, 01);
      DateTime t2 = t1.AddDays(5);
      Calendar1.SelectedDates.SelectRange(t1, t2);

      TimeSpan t = new DateTime(2024, 08, 07) - DateTime.Now;
      Label1.Text = ("no of days left:" + t.Days);
    }  }}
```

OUTPUT :

01 September 2024

<		September 2024				>
Sun	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Sat**
25	26	27	28	29	30	31
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19BON DAY	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5

no of days left:-34

C] Demonstrate the use of Treeview operations on the web form.

Master page:

```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site1.master.cs" Inherits="WebApplication5.Site1" %>

<!DOCTYPE html>

<html>

<head runat="server">

    <title></title>

    <asp:ContentPlaceHolder ID="head" runat="server">

    </asp:ContentPlaceHolder>

</head>

<body>

    <form id="form1" runat="server">

        <div>

            <asp:Table ID="Table1" runat="server" Height="166px" Width="312px">

                <asp:TableRow>

                    <asp:TableCell>

                        <asp:TreeView ID="TreeView1" runat="server">

                            <Nodes>

                                <asp:TreeNode Text="TYIT SEM 5">
```

```
                        <asp:TreeNode Text="NGT"
NavigateUrl="~/WebForm1.aspx"></asp:TreeNode>

                        <asp:TreeNode Text="AWP"
NavigateUrl="~/WebForm2.aspx"></asp:TreeNode>

                        <asp:TreeNode Text="AI"
NavigateUrl="~/WebForm3.aspx"></asp:TreeNode>

                    </asp:TreeNode>

                </Nodes>

            </asp:TreeView>

        </asp:TableCell>

        <asp:TableCell>

            <asp:ContentPlaceHolder ID="ContentPlaceHolder1"
runat="server"></asp:ContentPlaceHolder>

        </asp:TableCell>

    </asp:TableRow>

</asp:Table>

</div>

</form>

</body>

</html>
```

Webform1.aspx:

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
Inherits="WebApplication5.WebForm1" %>

<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">

    NGT

</asp:Content>

<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">

    Next Generation Technologies
```

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

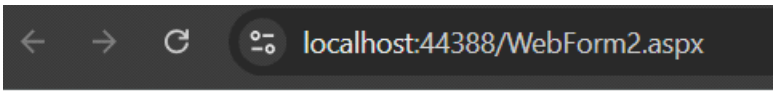
Webform2.aspx

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
  AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
  Inherits="WebApplication5.WebForm2" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
    AWP
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
    Advanced Web Programming
</asp:Content>
```

Webform3.aspx

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site1.Master"
  AutoEventWireup="true" CodeBehind="WebForm3.aspx.cs"
  Inherits="WebApplication5.WebForm3" %>

<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
    AI
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
    Artificial Intelligence
</asp:Content>
```

OUTPUT :



AWP

TYIT SEM 5

NGT

AWP

AI

Advanced Web Programming

PRACTICAL 4 :

A] Create a Registration form to demonstrate use of various Validation controls.

WebForm4 .aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm4.aspx.cs"
  Inherits="AWP_practicals_1.WebForm4" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
         Enter Name : <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
         <asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server"
  ErrorMessage="Enter valid name !!!" ControlToValidate="TextBox1"
  ValidationGroup="vg1">
         </asp:RequiredFieldValidator>

         <br />

         Enter Age : <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
         <asp:RangeValidator ID="RangeValidator1" runat="server" ErrorMessage="Enter valid
  age !!!" MinimumValue="20" MaximumValue="50" ControlToValidate="TextBox2"
  Type="Integer" ValidationGroup="vg1">
         </asp:RangeValidator>

         <br />

         Enter Email : <asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
         <asp:RegularExpressionValidator ID="RegularExpressionValidator1" runat="server"
  ErrorMessage="Enter valid email !!!" ValidationExpression="^[^@\s]+@[^@\s]+\.[^@\s]+$"
  ControlToValidate="TextBox3" ValidationGroup="vg1">
         </asp:RegularExpressionValidator>

         <br />

         Enter Password: <asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>
         <asp:RequiredFieldValidator ID="RequiredFieldValidator2" runat="server"
  ErrorMessage="enter valid password" ControlToValidate="TextBox4"
```

```
  ValidationGroup="vg1">
        </asp:RequiredFieldValidator>

        <br />

        Re-Enter password : <asp:TextBox ID="TextBox5" runat="server"></asp:TextBox>
        <asp:CompareValidator ID="CompareValidator1" runat="server"
  ErrorMessage="Passwords do not match !!!" ControlToCompare="TextBox4"
  ControlToValidate="TextBox5" Operator="Equal" ForeColor="Red" ValidationGroup="vg1">
        </asp:CompareValidator>
        <br />
        <asp:Button ID="Button1" runat="server" Text="Button

" OnClick="Button1_Click" ValidationGroup="vg1" />
      </div>
    </form>
</body>
</html>
```

WebForm4.aspx.cs:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace pract4a
{
   public partial class WebForm4 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
      }
      protected void Button1_Click(object sender, EventArgs e)
      {
         if (Page.IsValid)
         {
            Response.Write("Success");
         }
      }
   }
}
```

OUTPUT :

Enter Name: 12
Enter Age: 19 enter valid age
Enter Email: sas enter valid email
Enter Password: 12
ReEnter password: 23 Passwords do not match. Button

Success
Enter Name: abc
Enter Age: 21
Enter Email: sachin@gmail.com
Enter Password: sac
ReEnter password: sac Button

B] Create Web Form to demonstrate use of Adrotator Control.

WebForm5.aspx:

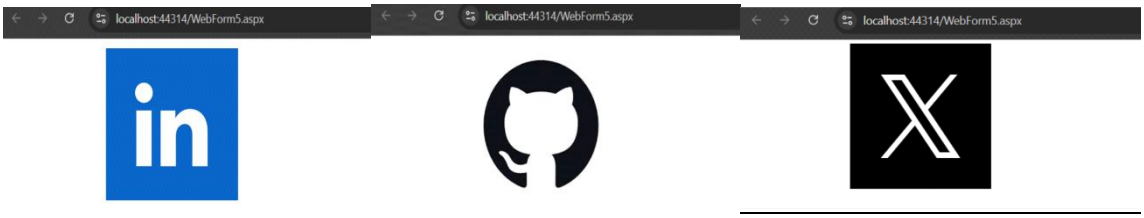
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm5.aspx.cs"
  Inherits="AWP_practicals_1.WebForm5" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:AdRotator ID="AdRotator1" runat="server"
  AdvertisementFile="~/FileName.xml"/>
        </div>
    </form>
</body>
</html>
```

FileName.xml:

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

<Advertisements>
  <Ad>
          <NavigateUrl> https://github.com/logos</NavigateUrl>
          <ImageUrl>https://encrypted-
```

```
tbn0.gstatic.com/images?q=tbn:ANd9GcSbqj9Ii13d6hx5a9kyLnC5A8A96LDSaSZv_w&s</Im
ageUrl>
        <AlternateText>gitub</AlternateText>
        <Impressions>20</Impressions>
        <Keywords>google</Keywords>
</Ad>
<Ad>
        <NavigateUrl>https://in.linkedin.com/</NavigateUrl>
        <ImageUrl>https://encrypted-
tbn0.gstatic.com/images?q=tbn:ANd9GcS4fcdsIUPUgmbvGaP-
RC4RbHYdVtoN_fM8aya_8gOXI2BRtClESO-
0_jgWTtKtIVmOQKs&usqp=CAU</ImageUrl>
        <AlternateText>linkedin</AlternateText>
        <Impressions>10</Impressions>
        <Keywords>google</Keywords>
</Ad>
<Ad>
        <NavigateUrl> https://x.com/</NavigateUrl>
        <ImageUrl>https://img.freepik.com/free-vector/new-2023-twitter-logo-x-icon-
design_1017-
45418.jpg?size=338&ext=jpg&ga=GA1.1.2008272138.1726012800&semt=ais_hybrid</Image
Url>
        <AlternateText>X</AlternateText>
        <Impressions>5</Impressions>
        <Keywords>google</Keywords>
</Ad>
</Advertisements>
```

OUTPUT :



C] Create Web Form to demonstrate use User Controls

practical4C.aspx:

```
<%@ Control Language="C#" AutoEventWireup="true" CodeBehind="practical4C.ascx.cs"
  Inherits="AWP_project.practical4C" %>
<asp:Calendar ID="Calendar1" runat="server"
  OnSelectionChanged="Calendar1_SelectionChanged"></asp:Calendar>
<asp:Label ID="Label1" runat="server" Text="Label"></asp:Label>
```

practical4C.aspx.cs:

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

namespace AWP_project
{
   public partial class practical4C : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
         Label1.Text = Calendar1.SelectedDate.ToLongDateString();
      }
   }
}
```

webform1.axpx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
  Inherits="AWP_project.WebForm1" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
         DOB <uc1:tyit runat="server" id="tyit" />
      </div>
   </form>
</body>
</html>
```

webform2.axpx:

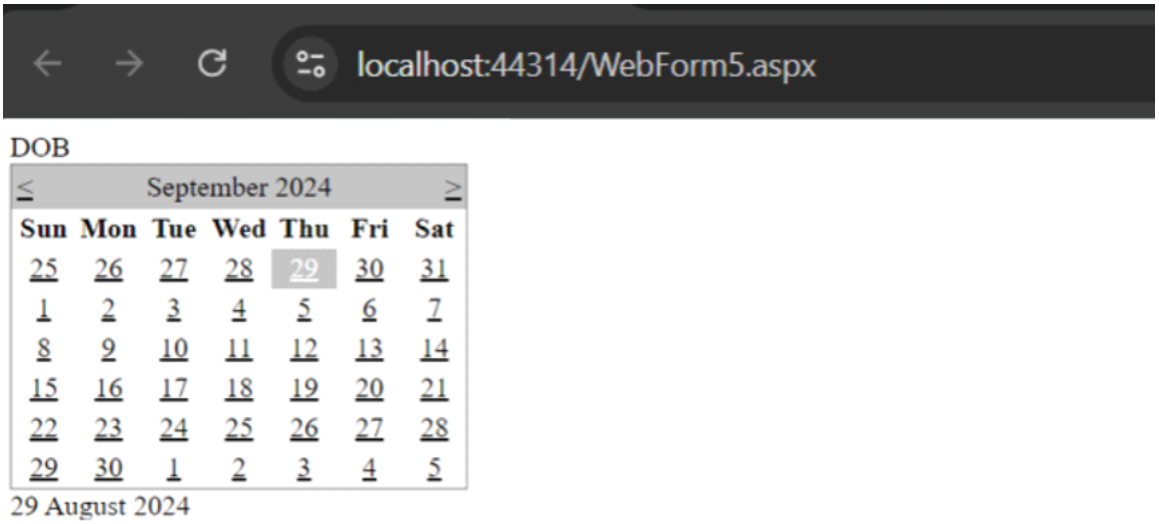
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
  Inherits="AWP_project.WebForm2" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
```

```
</head>
<body>
    <form id="form1" runat="server">
        <div>
            DOJ<uc1:tyit runat="server" id="tyit" />
        </div>
    </form>
</body>
</html>
```

webform3.axpx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm3.aspx.cs"
  Inherits="AWP_project.WebForm3" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            DOP<uc1:tyit runat="server" id="tyit" />
        </div>
    </form>
</body>
</html>
```

OUTPUT :



PRACTICAL 5 :

A] Create Web Form to demonstrate use of Website Navigation controls.
Create a web application to demonstrate use of Master Page and content page.

Master page:

```
<%@ Master Language="C#" AutoEventWireup="true" CodeBehind="Site2.master.cs"
Inherits="WebApplication5.Site2" %>

<!DOCTYPE html>

<html>

<head runat="server">

    <title></title>

    <asp:ContentPlaceHolder ID="head" runat="server">

    </asp:ContentPlaceHolder>

</head>

<body>

    <form id="form1" runat="server">

        <div>

            <asp:Table ID="Table1" runat="server" Height="391px" GridLines="Both"
Width="589px">

                <asp:TableRow>

                    <asp:TableCell ColumnSpan="2">TYIT MASTER PAGE</asp:TableCell>

                </asp:TableRow>

                <asp:TableRow>

                    <asp:TableCell>

                        <asp:Menu ID="Menu1" runat="server">

                            <Items>

                                <asp:MenuItem Text="SEM V">

                                    <asp:MenuItem Text="AWP"
NavigateUrl="~/WebForm5.aspx"></asp:MenuItem>

                                    <asp:MenuItem Text="NGT"
```

```
NavigateUrl="~/WebForm6.aspx"></asp:MenuItem>

                        <asp:MenuItem Text="AI"
NavigateUrl="~/WebForm7.aspx"></asp:MenuItem>

                        <asp:MenuItem Text="IOT"
NavigateUrl="~/WebForm8.aspx"></asp:MenuItem>

                    </asp:MenuItem>

                </Items>

            </asp:Menu>

        </asp:TableCell>

        <asp:TableCell>

            <asp:ContentPlaceHolder ID="ContentPlaceHolder1" runat="server">

            </asp:ContentPlaceHolder>

        </asp:TableCell>

    </asp:TableRow>

    <asp:TableRow>

        <asp:TableCell ColumnSpan="2">

            Copyright@2003

        </asp:TableCell>

    </asp:TableRow>

</asp:Table>

</div>

</form>

</body>

</html>
```

Webform5.aspx:

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site2.Master"
AutoEventWireup="true" CodeBehind="WebForm5.aspx.cs"
Inherits="WebApplication5.WebForm5" %>

<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
```

```
    AWP
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
    Advanced Web Programming
</asp:Content>
```

Webform6.aspx:

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site2.Master"
  AutoEventWireup="true" CodeBehind="WebForm6.aspx.cs"
  Inherits="WebApplication5.WebForm6" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
    NGT
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
    Next Generation Technologies
</asp:Content>
```

Webform7.aspx:

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site2.Master"
  AutoEventWireup="true" CodeBehind="WebForm7.aspx.cs"
  Inherits="WebApplication5.WebForm7" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
    AI
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
    Artificial Intelligence
</asp:Content>
```

Webform8.aspx:

```
<%@ Page Title="" Language="C#" MasterPageFile="~/Site2.Master"
  AutoEventWireup="true" CodeBehind="WebForm8.aspx.cs"
  Inherits="WebApplication5.WebForm8" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
    IOT
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="ContentPlaceHolder1" runat="server">
    Internet of Things
</asp:Content>
```

OUTPUT :

AWP

TYIT MASTER PAGE	
SEM V ▸ AWP NGT AI IOT	Advanced Web Programming
Copyright@2003	

B] Create a simple application to demonstrate your vacation using calendar control.

WebForm9.aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm9.aspx.cs"
  Inherits="WebApplication5.WebForm9" %>

<!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>
         <asp:Button ID="Button1" runat="server" Text="Reload" OnClick="Button_click1"/>
      </div>
   </form>
</body>
</html>
```

WebForm9.aspx.cs(ViewState):

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

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

namespace WebApplication5
{
   public partial class WebForm9 : System.Web.UI.Page
   {
      int x = 1;
      protected void Page_Load(object sender, EventArgs e)
      {
         if(!IsPostBack)
         {
            TextBox1.Text = "0";
         }
      }

      protected void Button_click1(object sender, EventArgs e)
      {
         if (ViewState["a"] != null)
         {
            x = Convert.ToInt32(ViewState["a"]) + 1;
         }
         TextBox1.Text = x.ToString();
         ViewState["a"] = x;

      }
   }
}
```

OUTPUT :

WebForm9.aspx.cs(Application):

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

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

namespace WebApplication5
{
   public partial class WebForm9 : System.Web.UI.Page
   {
      int x = 1;
      protected void Page_Load(object sender, EventArgs e)
      {
         if(!IsPostBack)
         {
            TextBox1.Text = "";
         }
      }

      protected void Button_click1(object sender, EventArgs e)
      {
         if (Application["a"] != null)
         {
            x = Convert.ToInt32(Application["a"]) + 1;
         }
         TextBox1.Text = x.ToString();
         Application["a"] = x;

      }
   }
}
```

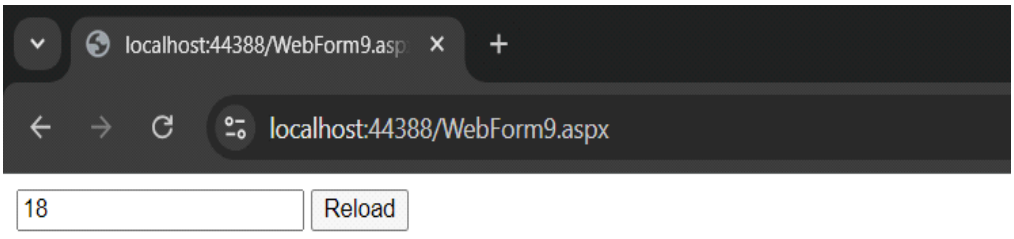
OUTPUT :

WebForm9.aspx.cs(Session):

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

namespace WebApplication5
{
```

```
public partial class WebForm9 : System.Web.UI.Page
{
    int x = 1;
    protected void Page_Load(object sender, EventArgs e)
    {
        if(!IsPostBack)
        {
            TextBox1.Text = "0";
        }
    }

    protected void Button_click1(object sender, EventArgs e)
    {
        if (Session["a"] != null)
        {
            x = Convert.ToInt32(Session["a"]) + 1;
        }
        TextBox1.Text = x.ToString();
        Session["a"] = x;
    }
}
}
```

OUTPUT :



PRACTICAL 6:

A] Create a web application for inserting and deleting records from a database.

WebForm1.aspx:

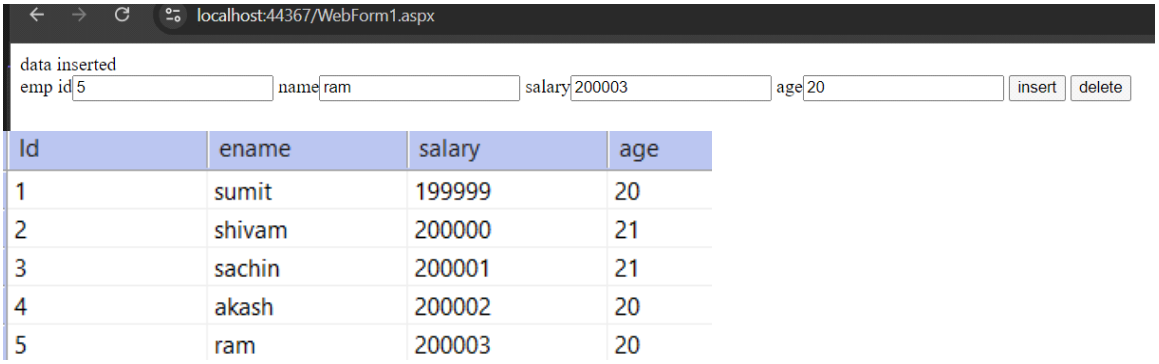
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs"
  Inherits="WebApplication6.WebForm1" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
         data inserted
         <br />
         emp id<asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
         name<asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
         salary<asp:TextBox ID="TextBox3" runat="server"></asp:TextBox>
         age<asp:TextBox ID="TextBox4" runat="server"></asp:TextBox>
         <asp:Button ID="Button1" runat="server" Text="insert" OnClick="Button1_Click"/>
         <asp:Button ID="Button2" runat="server" Text="delete" OnClick="Button2_Click"/>
      </div>
   </form>
</body>
</html>
```

WebForm1.aspx.cs:

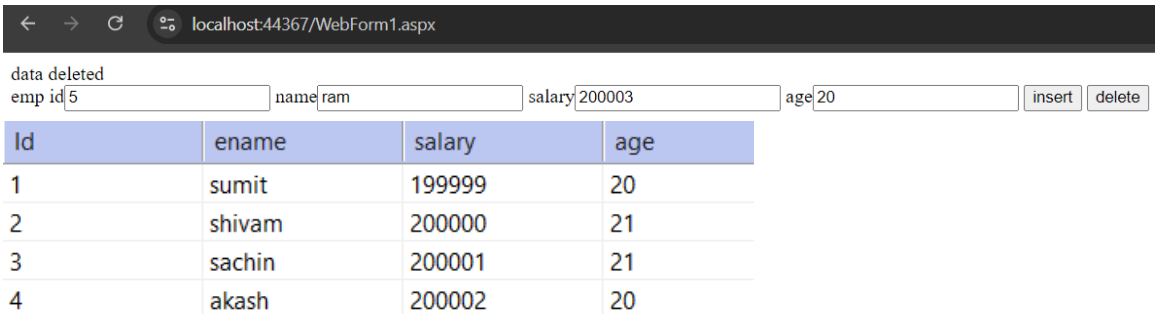
```
using System;
using System.Collections.Generic;
using System.Data.SqlClient;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data;
using System.Data.SqlClient;

namespace WebApplication6
{
   public partial class WebForm1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
```

```
        {

        }
}
    protected void Button1_Click(object sender, EventArgs e)
    {
        SqlConnection con = new SqlConnection("Data Source=SQL;Initial Catalog=tybscit;User
  ID=user1;Password=user1");
        SqlCommand cmd = new SqlCommand("insert into emp
  values(@Id,@ename,@salary,@age)", con);
        cmd.Parameters.AddWithValue("@Id", TextBox1.Text);
        cmd.Parameters.AddWithValue("@ename", TextBox2.Text);
        cmd.Parameters.AddWithValue("@salary", TextBox3.Text);
        cmd.Parameters.AddWithValue("@age", TextBox4.Text);
        con.Open();
        cmd.ExecuteNonQuery();
        Response.Write("data inserted");
        con.Close();
    }

    protected void Button2_Click(object sender, EventArgs e)
    {
        SqlConnection con = new SqlConnection("Data Source=SQL;Initial
  Catalog=tybsc123;User ID=user1;Password=user1");
        SqlCommand cmd = new SqlCommand("delete from emp where Id=@Id", con);
        cmd.Parameters.AddWithValue("@Id", TextBox1.Text);
        con.Open();
        cmd.ExecuteNonQuery();
        Response.Write("data deleted");
        con.Close();
    }

}
```

OUTPUT :



Id	ename	salary	age
1	sumit	199999	20
2	shivam	200000	21
3	sachin	200001	21
4	akash	200002	20
5	ram	200003	20



B] Create a web application to display Using Disconnected Data Access and Databinding using GridView

WebForm2.aspx:

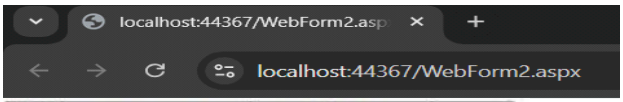
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm2.aspx.cs"
  Inherits="WebApplication6.WebForm2" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:GridView ID="GridView1" runat="server"></asp:GridView>
        </div>
    </form>
</body>
</html>
```

WebForm2.aspx.cs:

```
using System;using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
using System.Data;
using System.Data.SqlClient;
namespace WebApplication6
{
    public partial class WebForm2 : System.Web.UI.Page
```

```
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            SqlConnection con = new SqlConnection("Data Source=SQL;Initial
  Catalog=tybsc123;User ID=user1;Password=user1");
            SqlDataAdapter ad = new SqlDataAdapter("select * from emp", con);
            DataSet ds = new DataSet();
            ad.Fill(ds);
            GridView1.DataSource = ds;
            GridView1.DataBind();
        }
    }
}
```

OUTPUT :



Id	ename	salary	age
1	ram	1500000	21
2	shubham	2000000	21
3	sid	45999	20
4	akash	7800000	21
5	sachin	450000	21
6	a	10	1
7	avb	1000	20

PRACTICAL 7:

A] Create a web application to demonstrate the use of different types of Cookies.

practical7A1.aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Practical7A1.aspx.cs"
  Inherits="AWP_project.Practical7A1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
         Name : <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
         class : <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
         <asp:Button ID="Button1" runat="server" Text="submit" OnClick="Button1_Click" />
      </div>
   </form>
</body>
</html>
```

practical7A2.aspx.cs:

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

namespace AWP_project
{
   public partial class Practical7A1 : System.Web.UI.Page
   {
      protected void Button1_Click(object sender, EventArgs e)
      {
         HttpCookie cook = new HttpCookie("Info");
         cook["name"] = TextBox1.Text;
         cook["class"] = TextBox2.Text;
         Response.Cookies.Add(cook);
         cook.Expires = DateTime.Now.AddDays(10);
         Response.Redirect("Practical7A2.aspx");
      }
   }
}
```

practical7A1.aspx:

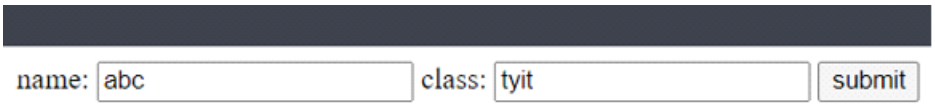
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Practical7A2.aspx.cs"
  Inherits="AWP_project.Practical7A2" %>

<!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="Label"></asp:Label>
         <asp:Label ID="Label2" runat="server" Text="Label"></asp:Label>

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

practical7A2.aspx.cs:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;
namespace AWP_project
{
   public partial class Practical7A2 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {
         HttpCookie cook = Request.Cookies["Info"];
         if (cook != null)
         {
            Label1.Text = cook["name"];
            Label2.Text = cook["age"];
         }
      }
   }
}
```

}

OUTPUT :



name: tyit class:abc name: Label class:Label

B] Create a web application to demonstrate Form Security and Windows Security with proper Authentication and Authorization properties.

practical7B.aspx:

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Practical7B1.aspx.cs"
  Inherits="AWP_project.Practical7B1" %>

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
   <title></title>
</head>
<body>
   <form id="form1" runat="server">
      <div>
         userID: <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox>
        password: <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
         <asp:Button ID="Button1" runat="server" Text="submit" OnClick="Button1_Click" />

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

practical7B.aspx.cs:

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

```
using System.Web.UI.WebControls;
using System.Web.Security;
namespace prac7b
{
   public partial class Practical7B1 : System.Web.UI.Page
   {
      protected void Page_Load(object sender, EventArgs e)
      {

      }

      protected void Button1_Click(object sender, EventArgs e)
      {
         if (FormsAuthentication.Authenticate(TextBox1.Text, TextBox2.Text))
         {
            FormsAuthentication.RedirectFromLoginPage(TextBox1.Text, false);
         }
         else
         {
            Response.Write("invalid credential");
            TextBox1.Text = "";
            TextBox2.Text = "";
         }
      }
   }
}
```

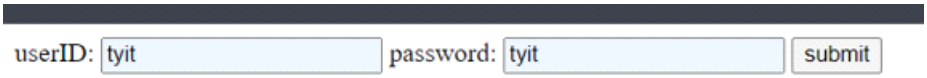
practical7B1.aspx:

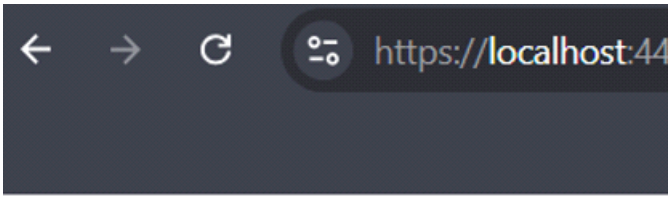
```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Practical7B1.aspx.cs"
  Inherits="AWP_project.Practical7A1" %>

<!DOCTYPE html>

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

practical7B1.config

```
<system.web>
 <authentication mode="Forms">
  <forms loginUrl="Practical7B1.aspx" defaultUrl="Practical7B1
.aspx" timeout="20" protection="None">
    <credentials passwordFormat="Clear">
          <user name="tyit" password="tyit"/>
    </credentials>
  </forms>
 </authentication>
 <authorization>
  <deny users="?"/>
 </authorization>
  <compilation debug="true" targetFramework="4.7.2" />
  <httpRuntime targetFramework="4.7.2" />
</system.web>
```

OUTPUT :





welcome