**10) Develop a web application in ASP.NET that utilizes different state**

**management techniques. Create a simple webpage with a form**

**containing user input fields. Implement the following state**

**management techniques and demonstrate their usage:**

**- View State:**

**a) Store a piece of information in the view state, such as a user's**

**input on the form.**

**b) Retrieve and display this information after a postback.**

**- Session State:**

**a) Store user-specific data in session state, like user preferences**

**or settings.**

**b) Implement a functionality to clear the session data after a**

**certain event or timeout.**

**1)add->webform:**

<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="WebForm1.aspx.cs" Inherits="view\_sessionState.WebForm1" %>

<!DOCTYPE html>

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

<head runat="server">

<title>State Management Example</title>

</head>

<body>

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

<div>

<h2>User Input Form</h2>

<asp:TextBox ID="txtName" runat="server" placeholder="Enter your name"></asp:TextBox>

<br />

<asp:Button ID="btnSubmit" runat="server" Text="Submit" OnClick="btnSubmit\_Click" />

<br />

<asp:Label ID="lblResult" runat="server"></asp:Label>

</div>

</form>

</body>

</html>

2)webform.aspx.cs:

using System;

using System.Collections.Generic;

using System.Linq;

using System.Web;

using System.Web.UI;

using System.Web.UI.WebControls;

namespace view\_sessionState

{

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

{

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

{

if (!IsPostBack)

{

ViewState["OriginalName"] = "";

}

// Check if session data is available

if (Session["UserPreferences"] != null)

{

// Retrieve session data and display

lblResult.Text += "<br />User preferences: " + Session["UserPreferences"].ToString();

}

}

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

{

// Store user input in ViewState

ViewState["OriginalName"] = txtName.Text;

// Store user preferences in Session State

Session["UserPreferences"] = "Any user-specific data";

// Display the information after postback

lblResult.Text = "Your original name: " + ViewState["OriginalName"].ToString();

}

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

{

// Clear session data on button click

Session.Clear();

lblResult.Text = "Session data cleared.";

}

}

}