- Create a User Registration Web Form with following Details and store data in Database and also use validators controls to apply validations
 - Full Name (Apply Required Field Validator)
 - Address (Apply Required Field Validator)
 - Mobile No (Apply Required Field Validator)
 - Email (Check Email is proper or not using Regular Expression Validator)
 - DOJ (date of joining) (Apply Required Field Validator)
 - UserID (Apply Required Field Validator)
 - Password (Apply Required Field Compare with Confirm Password)

Ans:

```
Webform1.aspx:
<%@ Page Language="vb" AutoEventWireup="false"</p>
CodeBehind="WebForm1.aspx.vb" Inherits="vtp.WebForm1" %>
<!DOCTYPE html>
<a href="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>user registration</title>
  <script src="https://code.jquery.com/jquery-3.6.0.min.js"></script>
  <link rel="stylesheet" href="StyleSheet1.css">
</head>
<body>
  <form id="form1" runat="server" class="form-container">
    <h1 class="auto-style3">User Registration</h1>
    <div class="form-group">
      <asp:Label ID="lblFullName" runat="server" Text="Full Name"></asp:Label>
      <asp:TextBox ID="txtFullName" runat="server"></asp:TextBox>
      <asp:RequiredFieldValidator ID="rfvFullName" runat="server"
ControlToValidate="txtFullName" ErrorMessage="Full Name is required."
CssClass="error"></asp:RequiredFieldValidator>
    </div>
    <div class="form-group">
      <asp:Label ID="lblAddress" runat="server" Text="Address"></asp:Label>
      <asp:TextBox ID="txtAddress" runat="server"></asp:TextBox>
```

```
<asp:RequiredFieldValidator ID="rfvAddress" runat="server"
ControlToValidate="txtAddress" ErrorMessage="Address is required."
CssClass="error"></asp:RequiredFieldValidator>
    </div>
    <div class="form-group">
      <asp:Label ID="lblMobileNo" runat="server" Text="Mobile"
No"></asp:Label>
      <asp:TextBox ID="txtMobileNo" runat="server"></asp:TextBox>
      <asp:RequiredFieldValidator ID="rfvMobileNo" runat="server"
ControlToValidate="txtMobileNo" ErrorMessage="Mobile Number is required."
CssClass="error"></asp:RequiredFieldValidator>
    </div>
    <div class="form-group">
      <asp:Label ID="lblEmail" runat="server" Text="Email"></asp:Label>
      <asp:TextBox ID="txtEmail" runat="server"></asp:TextBox>
      <asp:RegularExpressionValidator ID="revEmail" runat="server"</pre>
ControlToValidate="txtEmail" ErrorMessage="Invalid email format."
ValidationExpression="^\w+@[a-zA-Z_]+?\.[a-zA-Z]{2,3}$"
CssClass="error"></asp:RegularExpressionValidator>
    </div>
    <div class="form-group">
      <asp:Label ID="lblDOJ" runat="server" Text="Date of Joining"></asp:Label>
      <asp:TextBox ID="txtDOJ" runat="server"></asp:TextBox>
      <asp:RequiredFieldValidator ID="rfvDOJ" runat="server"
ControlToValidate="txtDOJ" ErrorMessage="Date of Joining is required."
CssClass="error"></asp:RequiredFieldValidator>
    </div>
    <div class="form-group">
      <asp:Label ID="lblUserID" runat="server" Text="UserID"></asp:Label>
      <asp:TextBox ID="txtUserID" runat="server"></asp:TextBox>
      <asp:RequiredFieldValidator ID="rfvUserID" runat="server"
ControlToValidate="txtUserID" ErrorMessage="UserID is required."
CssClass="error"></asp:RequiredFieldValidator>
    </div>
    <div class="form-group">
      <asp:Label ID="lblPassword" runat="server" Text="Password"></asp:Label>
      <asp:TextBox ID="txtPassword" runat="server"
TextMode="Password"></asp:TextBox>
```

```
<asp:RequiredFieldValidator ID="rfvPassword" runat="server"
ControlToValidate="txtPassword" ErrorMessage="Password is required."
CssClass="error"></asp:RequiredFieldValidator>
    </div>
    <div class="form-group">
      <asp:Label ID="lblConfirmPassword" runat="server" Text="Confirm"
Password"></asp:Label>
      <asp:TextBox ID="txtConfirmPassword" runat="server"
TextMode="Password"></asp:TextBox>
      <asp:CompareValidator ID="cvConfirmPassword" runat="server"
ControlToValidate="txtConfirmPassword" ControlToCompare="txtPassword"
ErrorMessage="Passwords do not match."
CssClass="error"></asp:CompareValidator>
    </div>
    <div class="form-group">
      <asp:Button ID="Button1" runat="server" Text="Submit" Height="40px"
OnClick="Button1_Click" Width="136px" />
      <asp:Button ID="Button2" runat="server" Text="Reset" CssClass="reset-</pre>
button" OnClick="Button2 Click" Height="40px" Width="136px" />
    </div>
  </form>
</body>
</html>
Webform1.aspx.vb:
Imports System.Data.SqlClient
Public Class WebForm1
  Inherits System.Web.UI.Page
  Dim connectionString As String = "Data Source=(localdb)\MSSQLLocalDB;Initial
Catalog=temp;Integrated Security=True;Connect
Timeout=30;Encrypt=False;TrustServerCertificate=False;"
  Protected Sub Button1_Click(sender As Object, e As EventArgs) Handles
Button1.Click
```

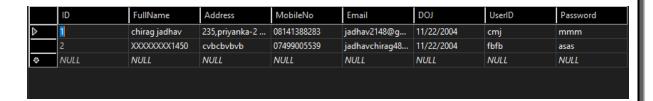
Dim fullName As String = txtFullName.Text

```
Dim address As String = txtAddress.Text
    Dim mobileNo As String = txtMobileNo.Text
    Dim email As String = txtEmail.Text
    Dim doj As DateTime = DateTime.Parse(txtDOJ.Text)
    Dim userID As String = txtUserID.Text
    Dim password As String = txtPassword.Text
    InsertUser(fullName, address, mobileNo, email, doj, userID, password)
    'Optionally, provide feedback to the user
    Response.Write("User registered successfully!")
  End Sub
  Protected Sub Button2 Click(sender As Object, e As EventArgs) Handles
Button2.Click
    resetForm()
  End Sub
  Private Sub resetForm()
    txtFullName.Text = ""
    txtAddress.Text = ""
    txtMobileNo.Text = ""
    txtEmail.Text = ""
    txtDOJ.Text = ""
    txtUserID.Text = ""
    txtPassword.Text = ""
    txtConfirmPassword.Text = ""
  End Sub
  Public Sub InsertUser(fullName As String, address As String, mobileNo As String,
email As String, doj As DateTime, userID As String, password As String)
    Using conn As New SqlConnection(connectionString)
      Dim query As String = "INSERT INTO Users (FullName, Address, MobileNo,
Email, DOJ, UserID, Password) VALUES (@FullName, @Address, @MobileNo,
@Email, @DOJ, @UserID, @Password)"
      Using cmd As New SqlCommand(query, conn)
        cmd.Parameters.AddWithValue("@FullName", fullName)
        cmd.Parameters.AddWithValue("@Address", address)
        cmd.Parameters.AddWithValue("@MobileNo", mobileNo)
        cmd.Parameters.AddWithValue("@Email", email)
        cmd.Parameters.AddWithValue("@DOJ", doj)
        cmd.Parameters.AddWithValue("@UserID", userID)
```

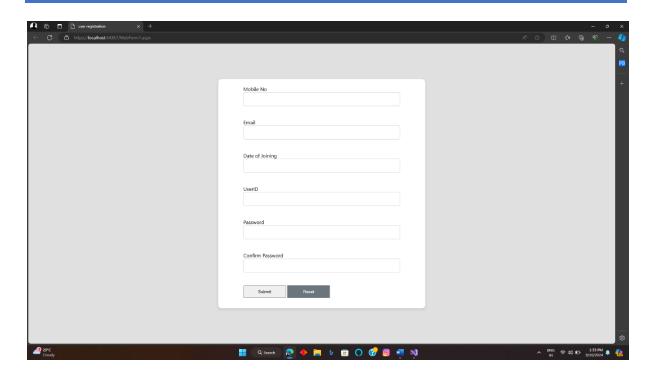
cmd.Parameters.AddWithValue("@Password", password) ' Consider hashing the password conn.Open() cmd.ExecuteNonQuery()
End Using
End Using
End Sub

End Class

Table:



Output:



2. Create a Login Page using Login Control and check user name and password with database and give access to home page if user name and password are enter correctly otherwise give appropriate message about wrong user name and password. After Successful login, Create Session of UseID and show UserID in Header portion of master page. Also give Signup (Registration) page link to new user in this Login Page.

ANS:

```
Login.aspx:
```

<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="login.aspx.vb"
Inherits="vtp.login" %>

<!DOCTYPE html>

```
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <title>Log In</title>
  <style>
  body {
```

```
font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
 background-color: #f4f4f4; /* Light background color */
  margin: 0;
  padding: 0;
  display: flex;
 justify-content: center;
  align-items: center;
 height: 100vh;
}
.form-container {
  background-color: #ffffff;
 padding: 40px;
 border-radius: 12px;
  box-shadow: 0 8px 16px rgba(0, 0, 0, 0.1);
  width: 350px;
 max-width: 90%;
}
.form-container h2 {
  margin-top: 0;
 font-size: 24px;
  color: #333;
 text-align: center;
}
.login-control {
  margin-bottom: 20px;
```

```
}
.login-control label {
  font-weight: bold;
  font-size: 16px;
  color: #555;
  display: block;
  margin-bottom: 35px;
  margin-right: 15px;
}
.login-textbox {
  width: 100%;
  padding: 12px;
  font-size: 16px;
  border-radius: 8px;
  border: 1px solid #ddd;
  box-sizing: border-box;
  margin-bottom: 15px;
  transition: border-color 0.3s;
}
.login-textbox:focus {
  border-color: #007BFF;
  outline: none;
}
.btn-login {
```

```
width: 100%;
 padding: 12px;
 font-size: 16px;
 color: #fff;
 background-color: #007BFF;
 border: none;
 border-radius: 8px;
 cursor: pointer;
 margin-left: 6px;
 transition: background-color 0.3s;
}
.btn-login:hover {
 background-color: #0056b3;
}
.signup-link {
 margin-top: 20px;
 text-align: center;
}
.login-control .remember-me-label {
 margin-top: 20px;
 flex: content;
}
.signup-link a {
```

```
color: #007BFF;
      text-decoration: none;
      font-size: 14px;
    }
    .signup-link a:hover {
      text-decoration: underline;
    }
  </style>
</head>
<body>
  <form id="form1" runat="server" class="form-container">
    <h2>Log In</h2>
    <asp:Login ID="Login1" runat="server" OnAuthenticate="Login1_Authenticate"</pre>
CssClass="login-control">
      <TitleTextStyle Font-Bold="False" Font-Size="Opt" ForeColor="#ffffff" />
      <InstructionTextStyle ForeColor="#000000" />
      <LabelStyle Font-Bold="True" Font-Size="14pt" ForeColor="#555" />
      <TextBoxStyle CssClass="login-textbox" />
      <LoginButtonStyle CssClass="btn-login" />
      <HyperLinkStyle ForeColor="#333333" />
      <ValidatorTextStyle ForeColor="Red" Font-Names="Verdana" Font-Size="Small" />
    </asp:Login>
    <div class="signup-link">
      <asp:HyperLink ID="hlSignup" runat="server"
NavigateUrl="~/WebForm1.aspx">Sign Up</asp:HyperLink>
    </div>
  </form>
</body>
```

```
</html>
       Login.aspx.vb:
Imports System.Data.SqlClient
Public Class login
  Inherits System.Web.UI.Page
  Protected Sub Login1_Authenticate(sender As Object, e As AuthenticateEventArgs)
    Dim userID As String = Login1.UserName
    Dim password As String = Login1.Password
    'Validate user credentials
    If ValidateUser(userID, password) Then
      'Create a session for the UserID and redirect to home page
      Session("UserID") = userID
      Response.Redirect("Home.aspx")
    Else
      ' Display error message
      Login1.FailureText = "Invalid UserID or password."
    Fnd If
  End Sub
  Private Function ValidateUser(userID As String, password As String) As Boolean
    Dim isValid As Boolean = False
    Dim connectionString As String = "Data Source=(localdb)\MSSQLLocalDB;Initial
Catalog=temp;Integrated Security=True;Connect
```

```
Timeout=30;Encrypt=False;TrustServerCertificate=False;" 'Replace with your actual
connection string
    Using conn As New SqlConnection(connectionString)
      Dim query As String = "SELECT COUNT(*) FROM Users WHERE UserID = @UserID
AND Password = @Password"
      Using cmd As New SqlCommand(query, conn)
        cmd.Parameters.AddWithValue("@UserID", userID)
        cmd.Parameters.AddWithValue("@Password", password) ' Consider hashing the
password in production
        conn.Open()
        Dim count As Integer = Convert.ToInt32(cmd.ExecuteScalar())
        If count > 0 Then
          isValid = True
        End If
     End Using
    End Using
    Return is Valid
  End Function
 Private Function GetUserID(userID As String) As Integer
    Dim userIDValue As Integer = -1
    Dim connectionString As String = "Your Connection String Here" 'Replace with your
actual connection string
    Using conn As New SqlConnection(connectionString)
      Dim query As String = "SELECT ID FROM Users WHERE UserID = @UserID"
      Using cmd As New SqlCommand(query, conn)
        cmd.Parameters.AddWithValue("@UserID", userID)
        conn.Open()
        userIDValue = Convert.ToInt32(cmd.ExecuteScalar())
      End Using
```

```
End Using
    Return userIDValue
  End Function
End Class
      Site1.master:
<%@ Master Language="VB" AutoEventWireup="false" CodeBehind="Site1.master.vb"</p>
Inherits="vtp.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 class="header">
      <asp:Label ID="lblUserID" runat="server" />
    </div>
    <div class="content">
      <asp:ContentPlaceHolder ID="MainContent" runat="server" />
    </div>
    <div class="footer">
      <!-- Footer content -->
    </div>
```

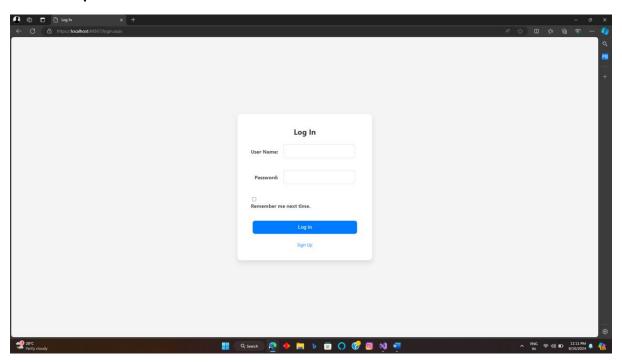
```
</form>
</body>
</html>
       Site1.master.vb:
Public Class Site1
  Inherits System.Web.UI.MasterPage
  Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
    If Not IsPostBack Then
      If Session("UserID") IsNot Nothing Then
        lblUserID.Text = "Welcome, UserID: " & Session("UserID").ToString()
      Else
        lblUserID.Text = "Welcome, Guest"
      End If
    End If
  End Sub
End Class
       Home.aspx:
<%@ Page Title="" Language="vb" AutoEventWireup="false"</pre>
MasterPageFile="~/Site1.Master" CodeBehind="Home.aspx.vb" Inherits="vtp.Home" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
```

</asp:Content>

<asp:Content ID="Content2" ContentPlaceHolderID="MainContent" runat="server">
 <h1>Welcome to the Home Page</h1>

</asp:Content>

Output:



3. Develop a master page and home page with your own CSS with following link in master page. (master page should be divide in 3 sections 1st Header, 2nd Content page and 3rd Footer) ● Home ● +-/* ● Employee ● Data List ● Form View ● Viewstate ● Query String ● Logout

ANS:

Site1.master:

<%@ Master Language="VB" AutoEventWireup="false" CodeBehind="Site1.master.vb"
Inherits="vtp.Site1" %>

<!DOCTYPE html>

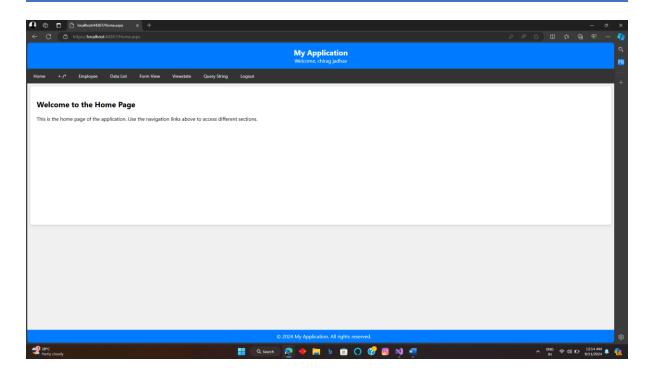
<html>

```
<head runat="server">
  <title></title>
  <style>
    body {
      font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif;
      margin: 0;
      padding: 0;
      background-color: #f0f0f0; /* Light background color */
    }
    .header {
      background-color: #007BFF; /* Header background color */
      color: white;
      padding: 15px;
      text-align: center;
    }
    .header h1 {
      margin: 0;
      font-size: 24px;
    }
    .nav {
      background-color: #333; /* Navigation bar color */
      overflow: hidden;
    }
    .nav a {
```

```
float: left;
  display: block;
 color: white;
 text-align: center;
  padding: 14px 20px;
  text-decoration: none;
 font-size: 14px;
}
.nav a:hover {
 background-color: #575757; /* Hover effect */
}
.content {
  padding: 20px;
 min-height: 400px; /* Ensure some height for content area */
 background-color: white;
 margin: 10px;
  box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
 border-radius: 5px;
}
.footer {
  background-color: #007BFF; /* Footer background color */
  color: white;
 text-align: center;
  padding: 10px;
  position: fixed;
```

```
width: 100%;
     bottom: 0;
    }
 </style>
 <asp:ContentPlaceHolder ID="head" runat="server">
  </asp:ContentPlaceHolder>
</head>
<body>
 <form id="form1" runat="server">
    <div class="header">
      <h1>My Application</h1>
      <asp:Label ID="lblUserID" runat="server" />
    </div>
    <div class="nav">
      <a href="Home.aspx">Home</a>
      <a href="MathOperations.aspx">+-/*</a>
      <a href="Employee.aspx">Employee</a>
      <a href="DataList.aspx">Data List</a>
      <a href="FormView.aspx">Form View</a>
      <a href="ViewStateExample.aspx">Viewstate</a>
      <a href="QueryStringExample.aspx">Query String</a>
      <a href="Logout.aspx">Logout</a>
    </div>
    <div class="content">
      <asp:ContentPlaceHolder ID="MainContent" runat="server" />
    </div>
```

```
<div class="footer">
     © 2024 My Application. All rights reserved.
    </div>
  </form>
</body>
</html>
Side1.master.vb:
Public Class Site1
  Inherits System.Web.UI.MasterPage
  Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
    If Not IsPostBack Then
      If Session("UserName") IsNot Nothing Then
        lblUserID.Text = "Welcome, " & Session("UserName").ToString()
      Else
        lblUserID.Text = "Welcome, Guest"
      End If
    End If
  End Sub
End Class
Output:
```



4. Develop a ASPX (Web Form) page to take input of two numbers using ASP textbox and perform Sum, Minus, Division and Multiply and Show the answer on another textbox.

ANS:

```
MathOperations.aspx:
```

```
max-width: 100%;
  margin: auto;
.form-group {
  margin-bottom: 20px;
}
.form-group label {
  font-weight: bold;
  display: block;
  margin-bottom: 5px;
  font-size: 14pt;
  color: #333;
}
.form-group input[type="text"] {
  width: 100%;
  padding: 10px;
  font-size: 14pt;
  border-radius: 5px;
  border: 1px solid #ccc;
  box-sizing: border-box;
  margin-bottom: 15px;
}
.form-group button {
  width: 100%;
```

```
padding: 12px;
 font-size: 14pt;
  color: #fff;
 background-color: #007BFF;
  border: none;
  border-radius: 5px;
  cursor: pointer;
 transition: all 0.3s ease; /* Smooth transition for all properties */
  margin-top: 10px;
  box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1); /* Button shadow */
 letter-spacing: 1px; /* Space between letters */
}
.form-group button:hover {
  background-color: #0056b3;
 transform: translateY(-2px); /* Slight lift on hover */
 box-shadow: 0 8px 15px rgba(0, 0, 0, 0.2); /* Larger shadow on hover */
}
.form-group button:active {
  background-color: #004494;
 transform: translateY(2px); /* Slight press effect on click */
  box-shadow: 0 4px 6px rgba(0, 0, 0, 0.1); /* Reset shadow on click */
}
.result {
  margin-top: 20px;
 font-size: 14pt;
```

```
color: #333;
    }
    .result input[type="text"] {
      width: 100%;
      padding: 10px;
      font-size: 14pt;
      border-radius: 5px;
      border: 1px solid #ccc;
      box-sizing: border-box;
      background-color: #f9f9f9;
      color: #555;
    }
  </style>
  <div class="form-container">
    <h2 style="text-align: center; color: #007BFF;">Math Operations</h2>
    <div class="form-group">
      <label for="txtNumber1">Number 1:</label>
      <asp:TextBox ID="txtNumber1" runat="server" CssClass="form-
control"></asp:TextBox>
    </div>
    <div class="form-group">
      <label for="txtNumber2">Number 2:</label>
      <asp:TextBox ID="txtNumber2" runat="server" CssClass="form-
control"></asp:TextBox>
    </div>
    <div class="form-group">
```

```
<asp:Button ID="btnSum" runat="server" Text="Sum" CssClass="btn"
OnClick="btnSum_Click" />
      <asp:Button ID="btnSubtract" runat="server" Text="Subtract" CssClass="btn"
OnClick="btnSubtract Click" />
      <asp:Button ID="btnMultiply" runat="server" Text="Multiply" CssClass="btn"
OnClick="btnMultiply Click" />
      <asp:Button ID="btnDivide" runat="server" Text="Divide" CssClass="btn"
OnClick="btnDivide_Click" />
    </div>
    <div class="result">
      <label for="txtResult">Result:</label>
      <asp:TextBox ID="txtResult" runat="server" CssClass="form-control"
ReadOnly="True"></asp:TextBox>
    </div>
  </div>
</asp:Content>
MathOperations.aspx.vb:
Public Class MathOperations
  Inherits System.Web.UI.Page
  Protected Sub btnSum_Click(sender As Object, e As EventArgs) Handles btnSum.Click
    PerformOperation("+")
  End Sub
  Protected Sub btnSubtract_Click(sender As Object, e As EventArgs) Handles
btnSubtract.Click
    PerformOperation("-")
  End Sub
```

```
Protected Sub btnMultiply_Click(sender As Object, e As EventArgs) Handles
btnMultiply.Click
    PerformOperation("*")
  End Sub
  Protected Sub btnDivide_Click(sender As Object, e As EventArgs) Handles
btnDivide.Click
    PerformOperation("/")
  End Sub
  Private Sub PerformOperation(operation As String)
    Dim number1 As Double
    Dim number2 As Double
    If Double.TryParse(txtNumber1.Text, number1) AndAlso
Double.TryParse(txtNumber2.Text, number2) Then
      Select Case operation
        Case "+"
          txtResult.Text = (number1 + number2).ToString()
        Case "-"
          txtResult.Text = (number1 - number2).ToString()
        Case "*"
          txtResult.Text = (number1 * number2).ToString()
        Case "/"
          If number2 <> 0 Then
            txtResult.Text = (number1 / number2).ToString()
          Else
            txtResult.Text = "Cannot divide by zero"
```

End If

End Select

Else

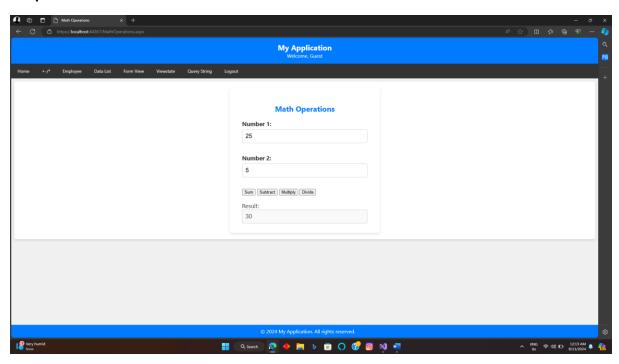
txtResult.Text = "Invalid input. Please enter valid numbers."

End If

End Sub

End Class

Output:



- 5. Create a Employee Record Web Form with following Details and perform Insert, Update, Delete Operation and Show Saved Records in GridView Control and also use validators controls to apply validations. Apply Paging Option in Gridview Control.
- Emp No
- Emp Name
- Mobile No
- Salary.

ANS:

Employee.aspx:

```
<%@ Page Title="" Language="vb" AutoEventWireup="false"</pre>
MasterPageFile="~/Site1.Master" CodeBehind="Employee.aspx.vb"
Inherits="vtp.Employee" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="MainContent" runat="server">
  <style>
    .form-container {
      background-color: #fff;
      padding: 30px 40px;
      border-radius: 10px;
      box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
      max-width: 600px;
      margin: auto;
    }
    .form-group {
      margin-bottom: 20px;
    }
    .form-group label {
      font-weight: bold;
      display: block;
      margin-bottom: 5px;
      font-size: 12pt;
    .form-group input[type="text"] {
      width: 100%;
```

```
padding: 8px;
    font-size: 12pt;
    border-radius: 5px;
    border: 1px solid #ccc;
    box-sizing: border-box;
  }
  .form-group button {
    padding: 10px 20px;
    font-size: 12pt;
    color: #fff;
    background-color: #007BFF;
    border: none;
    border-radius: 5px;
    cursor: pointer;
    margin-right: 10px;
    transition: background-color 0.3s;
  }
  .form-group button:hover {
    background-color: #0056b3;
  }
  .grid-container {
    margin-top: 30px;
  }
</style>
```

```
<div class="form-container">
    <h2>Employee Record Management</h2>
    <div class="form-group">
      <label for="txtEmpName">Emp Name:</label>
      <asp:TextBox ID="txtEmpName" runat="server"></asp:TextBox>
      <asp:RequiredFieldValidator ID="rfvEmpName" runat="server"
ControlToValidate="txtEmpName" ErrorMessage="Emp Name is required."
ForeColor="Red" Display="Dynamic" />
    </div>
    <div class="form-group">
      <label for="txtMobileNo">Mobile No:</label>
      <asp:TextBox ID="txtMobileNo" runat="server"></asp:TextBox>
      <asp:RequiredFieldValidator ID="rfvMobileNo" runat="server"
ControlToValidate="txtMobileNo" ErrorMessage="Mobile No is required."
ForeColor="Red" Display="Dynamic" />
    </div>
    <div class="form-group">
      <label for="txtSalary">Salary:</label>
      <asp:TextBox ID="txtSalary" runat="server"></asp:TextBox>
      <asp:RequiredFieldValidator ID="rfvSalary" runat="server"
ControlToValidate="txtSalary" ErrorMessage="Salary is required." ForeColor="Red"
Display="Dynamic" />
      <asp:RegularExpressionValidator ID="revSalary" runat="server"
ControlToValidate="txtSalary" ErrorMessage="Invalid Salary format."
ValidationExpression="^\d+(\.\d{1,2})?$" ForeColor="Red" Display="Dynamic" />
    </div>
    <div class="form-group">
      <asp:Button ID="btnInsert" runat="server" Text="Insert" OnClick="btnInsert Click"
CssClass="btn" style="height: 26px" />
      <asp:Button ID="btnUpdate" runat="server" Text="Update"
OnClick="btnUpdate Click" CssClass="btn" />
```

```
<asp:Button ID="btnDelete" runat="server" Text="Delete"
OnClick="btnDelete_Click" CssClass="btn" />
    </div>
  </div>
 <div class="grid-container">
    <asp:GridView ID="gvEmployees" runat="server" AutoGenerateColumns="False"
OnSelectedIndexChanged="gvEmployees SelectedIndexChanged"
OnPageIndexChanging="gvEmployees_PageIndexChanging" AllowPaging="True"
PageSize="5" CssClass="grid-view">
     <Columns>
        <asp:BoundField DataField="EmpNo" HeaderText="Emp No" ReadOnly="True" />
        <asp:BoundField DataField="EmpName" HeaderText="Emp Name" />
        <asp:BoundField DataField="MobileNo" HeaderText="Mobile No" />
        <asp:BoundField DataField="Salary" HeaderText="Salary"
DataFormatString="{0:C}" />
        <asp:CommandField ShowSelectButton="True" SelectText="Select" />
      </Columns>
    </asp:GridView>
 </div>
</asp:Content>
Employee.aspx.vb:
Imports System.Data.SqlClient
Public Class Employee
 Inherits System.Web.UI.Page
```

Private connectionString As String = "Data Source=(localdb)\MSSQLLocalDB;Initial Catalog=temp;Integrated Security=True;Connect
Timeout=30;Encrypt=False;TrustServerCertificate=False;" ' Update with your database connection string

```
Protected Sub Page Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
    If Not IsPostBack Then
      BindGridView()
    End If
  End Sub
 Private Sub BindGridView()
    Using conn As New SqlConnection(connectionString)
      Using cmd As New SqlCommand("SELECT EmpNo, EmpName, MobileNo, Salary
FROM Employees", conn)
        conn.Open()
        Dim dt As New DataTable()
        Dim adapter As New SqlDataAdapter(cmd)
        adapter.Fill(dt)
        gvEmployees.DataSource = dt
        gvEmployees.DataBind()
      End Using
    End Using
 End Sub
 Protected Sub btnInsert_Click(sender As Object, e As EventArgs)
    Using conn As New SqlConnection(connectionString)
      Using cmd As New SqlCommand("INSERT INTO Employees (EmpName, MobileNo,
Salary) VALUES (@EmpName, @MobileNo, @Salary)", conn)
```

```
cmd.Parameters.AddWithValue("@EmpName", txtEmpName.Text)
       cmd.Parameters.AddWithValue("@MobileNo", txtMobileNo.Text)
       cmd.Parameters.AddWithValue("@Salary", Convert.ToDecimal(txtSalary.Text))
       conn.Open()
       cmd.ExecuteNonQuery()
     End Using
   End Using
   ClearFields()
   BindGridView()
  End Sub
 Protected Sub btnUpdate_Click(sender As Object, e As EventArgs)
   If gvEmployees.SelectedRow IsNot Nothing Then
     Dim empNo As Integer = Convert.ToInt32(gvEmployees.SelectedRow.Cells(0).Text)
     Using conn As New SqlConnection(connectionString)
       Using cmd As New SqlCommand("UPDATE Employees SET
EmpName=@EmpName, MobileNo=@MobileNo, Salary=@Salary WHERE
EmpNo=@EmpNo", conn)
         cmd.Parameters.AddWithValue("@EmpNo", empNo)
         cmd.Parameters.AddWithValue("@EmpName", txtEmpName.Text)
         cmd.Parameters.AddWithValue("@MobileNo", txtMobileNo.Text)
         cmd.Parameters.AddWithValue("@Salary", Convert.ToDecimal(txtSalary.Text))
         conn.Open()
         cmd.ExecuteNonQuery()
       End Using
     End Using
     ClearFields()
     BindGridView()
   End If
```

End Sub

```
Protected Sub btnDelete_Click(sender As Object, e As EventArgs)
    If gvEmployees. Selected Row Is Not Nothing Then
      Dim empNo As Integer = Convert.ToInt32(gvEmployees.SelectedRow.Cells(0).Text)
      Using conn As New SqlConnection(connectionString)
        Using cmd As New SqlCommand("DELETE FROM Employees WHERE
EmpNo=@EmpNo", conn)
          cmd.Parameters.AddWithValue("@EmpNo", empNo)
          conn.Open()
          cmd.ExecuteNonQuery()
        End Using
      End Using
      ClearFields()
      BindGridView()
    End If
  End Sub
  Protected Sub gvEmployees_SelectedIndexChanged(sender As Object, e As EventArgs)
    txtEmpName.Text = gvEmployees.SelectedRow.Cells(1).Text
    txtMobileNo.Text = gvEmployees.SelectedRow.Cells(2).Text
    txtSalary.Text = gvEmployees.SelectedRow.Cells(3).Text
  End Sub
  Protected Sub gvEmployees_PageIndexChanging(sender As Object, e As
GridViewPageEventArgs)
    gvEmployees.PageIndex = e.NewPageIndex
    BindGridView()
  End Sub
```

```
Private Sub ClearFields()

txtEmpName.Text = ""

txtMobileNo.Text = ""

txtSalary.Text = ""

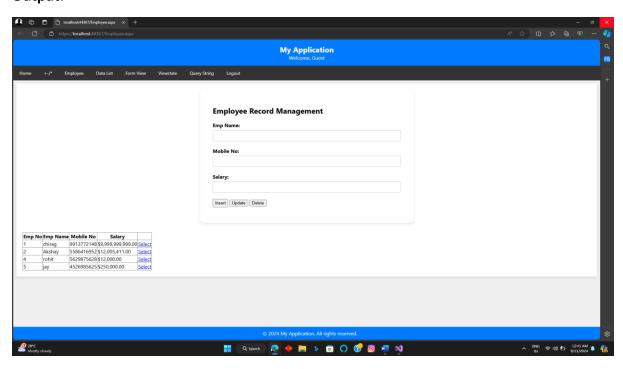
End Sub

End Class
```

Employee table:

	EmpNo	EmpName	MobileNo	Salary
⊳	1	chirag	9913772148	999999999.00
	2	Akshay	5586416952	12005411.00
	4	rohit	5629875628	12000.00
	5	jay	4526985625	250000.00
Ф	NULL	NULL	NULL	NULL

Output:



6. Create a web form that will show the employee records using Data List Controls and apply any of Auto Format Style.

ANS:

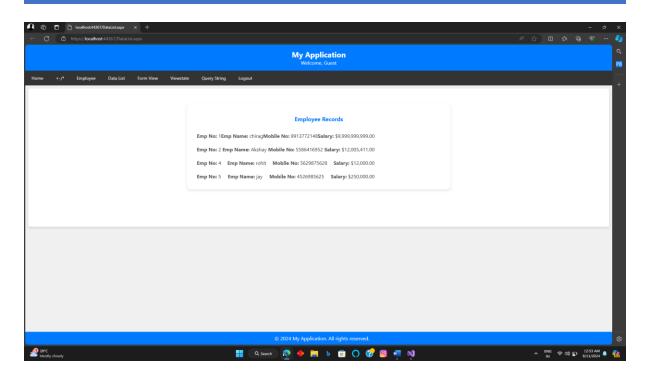
```
DataList.aspx:
<%@ Page Title="" Language="vb" AutoEventWireup="false"</pre>
MasterPageFile="~/Site1.Master" CodeBehind="DataList.aspx.vb" Inherits="vtp.DataList"
%>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="MainContent" runat="server">
  <style>
    .datalist-container {
      background-color: #fff;
      padding: 20px;
      border-radius: 10px;
      box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
      max-width: 800px;
      margin: auto;
      margin-top: 30px;
    }
    .datalist-header {
      font-weight: bold;
      font-size: 18px;
      text-align: center;
      margin-bottom: 20px;
      color: #007BFF;
    .datalist-item {
      padding: 10px;
```

```
border-bottom: 1px solid #ddd;
    display: flex;
    justify-content: space-between;
  }
  .datalist-item:last-child {
    border-bottom: none;
  }
  .datalist-label {
    font-weight: bold;
    color: #555;
  }
  .datalist-value {
    color: #333;
  }
</style>
<div class="datalist-container">
  <h2 class="datalist-header">Employee Records</h2>
  <asp:DataList ID="dlEmployees" runat="server" AutoGenerateColumns="False">
    <ItemTemplate>
      <div class="datalist-item">
        <div>
          <span class="datalist-label">Emp No:</span>
          <span class="datalist-value"><%# Eval("EmpNo") %></span>
        </div>
```

```
<div>
            <span class="datalist-label">Emp Name:</span>
            <span class="datalist-value"><%# Eval("EmpName") %></span>
          </div>
          <div>
            <span class="datalist-label">Mobile No:</span>
            <span class="datalist-value"><%# Eval("MobileNo") %></span>
          </div>
          <div>
            <span class="datalist-label">Salary:</span>
            <span class="datalist-value"><%# Eval("Salary", "{0:C}") %></span>
          </div>
        </div>
      </ltemTemplate>
    </asp:DataList>
  </div>
</asp:Content>
DataList.aspx.vb:
Imports System.Data.SqlClient
Public Class DataList
  Inherits System.Web.UI.Page
  Private connectionString As String = "Data Source=(localdb)\MSSQLLocalDB;Initial
Catalog=temp;Integrated Security=True;Connect
Timeout=30;Encrypt=False;TrustServerCertificate=False;" 'Replace with your actual
```

connection string

```
Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
    If Not IsPostBack Then
      BindDataList()
    End If
  End Sub
 Private Sub BindDataList()
    Using conn As New SqlConnection(connectionString)
      Using cmd As New SqlCommand("SELECT EmpNo, EmpName, MobileNo, Salary
FROM Employees", conn)
        conn.Open()
        Dim dt As New DataTable()
        Dim adapter As New SqlDataAdapter(cmd)
        adapter.Fill(dt)
        dlEmployees.DataSource = dt
        dlEmployees.DataBind()
      End Using
    End Using
  End Sub
End Class
OutPut:
```



7. Create a web form that will show the employee records using FormView Controls and apply Numeric Paging style to it.

ANS:

```
FormView.aspx:
```

```
margin: auto;
  margin-top: 30px;
.formview-header {
  font-weight: bold;
  font-size: 18px;
  text-align: center;
  margin-bottom: 20px;
  color: #007BFF;
}
.formview-item {
  padding: 10px;
  border-bottom: 1px solid #ddd;
}
.formview-label {
  font-weight: bold;
  color: #555;
}
.formview-value {
  color: #333;
}
.pager {
  text-align: center;
```

```
margin-top: 20px;
  }
  .pager a {
    color: #007BFF;
    text-decoration: none;
    padding: 5px 10px;
    border: 1px solid #007BFF;
    border-radius: 5px;
    margin: 0 5px;
    transition: all 0.3s ease;
  }
  .pager a:hover {
    background-color: #007BFF;
    color: white;
  }
  .pager .current {
    background-color: #0056b3;
    color: white;
    padding: 5px 10px;
    border: 1px solid #0056b3;
    border-radius: 5px;
    margin: 0 5px;
  }
</style>
```

```
<div class="formview-container">
    <h2 class="formview-header">Employee Records</h2>
    <asp:FormView ID="fvEmployees" runat="server" DataKeyNames="EmpNo"
AllowPaging="True" OnPageIndexChanging="fvEmployees_PageIndexChanging">
      <ItemTemplate>
        <div class="formview-item">
         <span class="formview-label">Emp No:</span>
         <span class="formview-value"><%# Eval("EmpNo") %></span>
        </div>
        <div class="formview-item">
         <span class="formview-label">Emp Name:</span>
         <span class="formview-value"><%# Eval("EmpName") %></span>
        </div>
        <div class="formview-item">
         <span class="formview-label">Mobile No:</span>
         <span class="formview-value"><%# Eval("MobileNo") %></span>
        </div>
        <div class="formview-item">
          <span class="formview-label">Salary:</span>
          <span class="formview-value"><%# Eval("Salary", "{0:C}") %></span>
        </div>
      </ltemTemplate>
      <PagerSettings Mode="Numeric" PageButtonCount="5" />
      <PagerStyle CssClass="pager" />
    </asp:FormView>
  </div>
</asp:Content>
```

FormView.aspx.vb:

```
Imports System.Data.SqlClient
Public Class FormView
 Inherits System.Web.UI.Page
 Private connectionString As String = "Data Source=(localdb)\MSSQLLocalDB;Initial
Catalog=temp;Integrated Security=True;Connect
Timeout=30;Encrypt=False;TrustServerCertificate=False;" 'Replace with your actual
connection string
  Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
    If Not IsPostBack Then
      BindFormView()
    End If
 End Sub
 Private Sub BindFormView()
    Using conn As New SqlConnection(connectionString)
      Using cmd As New SqlCommand("SELECT EmpNo, EmpName, MobileNo, Salary
FROM Employees", conn)
        conn.Open()
        Dim dt As New DataTable()
        Dim adapter As New SqlDataAdapter(cmd)
        adapter.Fill(dt)
        fvEmployees.DataSource = dt
        fvEmployees.DataBind()
      End Using
    End Using
```

End Sub

Protected Sub fvEmployees_PageIndexChanging(sender As Object, e As FormViewPageEventArgs)

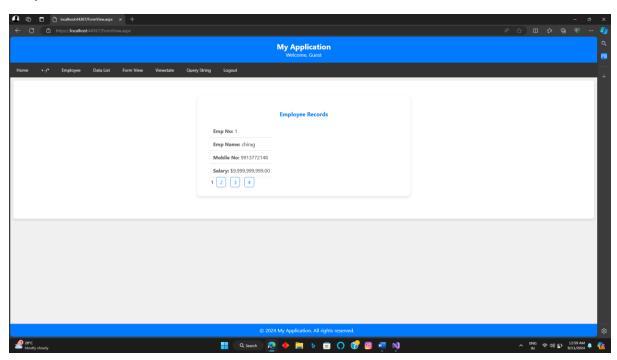
fvEmployees.PageIndex = e.NewPageIndex

BindFormView()

End Sub

End Class

Output:



8. Create a Web form to Demonstrate use of ViewState Example.

ANS:

 $\label{lem:viewStateExample.aspx:} ViewStateExample.aspx:$

<%@ Page Title="" Language="vb" AutoEventWireup="false"
MasterPageFile="~/Site1.Master" CodeBehind="ViewStateExample.aspx.vb"
Inherits="vtp.ViewStateExample" %>

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

```
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="MainContent" runat="server">
  <style>
    .form-container {
      background-color: #fff;
      padding: 30px 40px;
      border-radius: 10px;
      box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
      max-width: 500px;
      margin: auto;
      margin-top: 30px;
    }
    .form-header {
      font-weight: bold;
      font-size: 18px;
      text-align: center;
      margin-bottom: 20px;
      color: #007BFF;
    }
    .form-group {
      margin-bottom: 20px;
    }
    .form-group label {
      font-weight: bold;
      display: block;
```

```
margin-bottom: 5px;
 font-size: 12pt;
.form-group input[type="text"] {
 width: 100%;
 padding: 8px;
 font-size: 12pt;
 border-radius: 5px;
 border: 1px solid #ccc;
 box-sizing: border-box;
}
.form-group button {
 padding: 10px 20px;
 font-size: 12pt;
 color: #fff;
 background-color: #007BFF;
 border: none;
 border-radius: 5px;
 cursor: pointer;
 margin-right: 10px;
 transition: background-color 0.3s;
}
.form-group button:hover {
 background-color: #0056b3;
}
```

```
.result-label {
      font-size: 14pt;
      color: #333;
      margin-top: 20px;
    }
  </style>
  <div class="form-container">
    <h2 class="form-header">ViewState Example</h2>
    <div class="form-group">
      <label for="txtName">Enter Your Name:</label>
      <asp:TextBox ID="txtName" runat="server"></asp:TextBox>
    </div>
    <div class="form-group">
      <asp:Button ID="btnSave" runat="server" Text="Save to ViewState"
OnClick="btnSave_Click" CssClass="btn" />
      <asp:Button ID="btnRetrieve" runat="server" Text="Retrieve from ViewState"</pre>
OnClick="btnRetrieve_Click" CssClass="btn" />
    </div>
    <asp:Label ID="lblResult" runat="server" CssClass="result-label"></asp:Label>
  </div>
</asp:Content>
ViewStateExample.aspx.vb:
Public Class ViewStateExample
  Inherits System.Web.UI.Page
```

Protected Sub btnSave_Click(sender As Object, e As EventArgs)

'Save the text from txtName into ViewState

ViewState("UserName") = txtName.Text

lblResult.Text = "Name saved to ViewState."

End Sub

Protected Sub btnRetrieve_Click(sender As Object, e As EventArgs)

' Retrieve the saved value from ViewState and display it

If ViewState("UserName") IsNot Nothing Then

lblResult.Text = "Retrieved from ViewState: " & ViewState("UserName").ToString()

Else

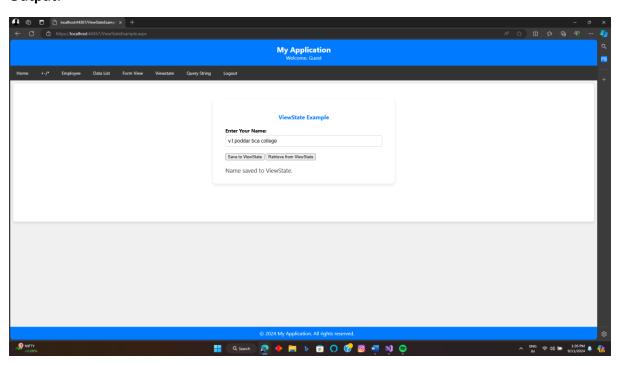
IblResult.Text = "No name found in ViewState."

End If

End Sub

End Class

Output:



9. Create a Web form to Demonstrate use of QueryString Example. Use Response.Redirect and Server.Transfer methods

ANS:

```
QueryStringExample.aspx:
<%@ Page Title="" Language="vb" AutoEventWireup="false"</p>
MasterPageFile="~/Site1.Master" CodeBehind="QueryStringExample.aspx.vb"
Inherits="vtp.QueryStringExample" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="MainContent" runat="server">
  <style>
    .form-container {
      background-color: #fff;
      padding: 30px 40px;
      border-radius: 10px;
      box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
      max-width: 500px;
      margin: auto;
      margin-top: 30px;
    }
    .form-header {
      font-weight: bold;
      font-size: 18px;
      text-align: center;
      margin-bottom: 20px;
      color: #007BFF;
```

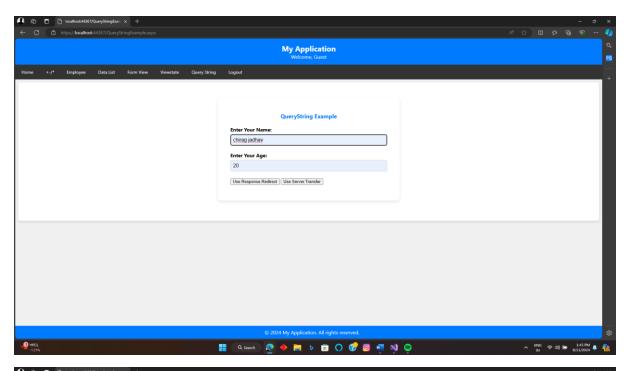
```
.form-group {
  margin-bottom: 20px;
}
.form-group label {
  font-weight: bold;
  display: block;
  margin-bottom: 5px;
  font-size: 12pt;
}
.form-group input[type="text"] {
  width: 100%;
  padding: 8px;
  font-size: 12pt;
  border-radius: 5px;
  border: 1px solid #ccc;
  box-sizing: border-box;
}
.form-group button {
  padding: 10px 20px;
  font-size: 12pt;
  color: #fff;
  background-color: #007BFF;
  border: none;
  border-radius: 5px;
```

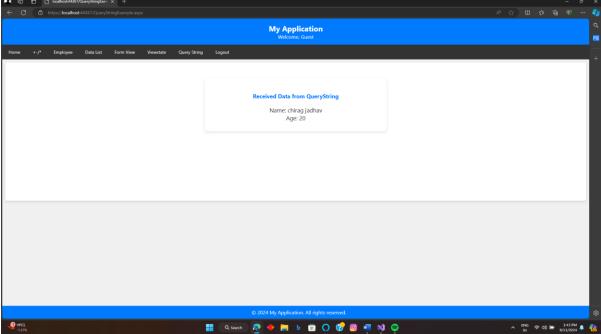
```
cursor: pointer;
      margin-right: 10px;
      transition: background-color 0.3s;
    }
    .form-group button:hover {
      background-color: #0056b3;
    }
  </style>
  <div class="form-container">
    <h2 class="form-header">QueryString Example</h2>
    <div class="form-group">
      <label for="txtName">Enter Your Name:</label>
      <asp:TextBox ID="txtName" runat="server"></asp:TextBox>
    </div>
    <div class="form-group">
      <label for="txtAge">Enter Your Age:</label>
      <asp:TextBox ID="txtAge" runat="server"></asp:TextBox>
    </div>
    <div class="form-group">
      <asp:Button ID="btnRedirect" runat="server" Text="Use Response.Redirect"
OnClick="btnRedirect_Click" CssClass="btn" />
      <asp:Button ID="btnTransfer" runat="server" Text="Use Server.Transfer"
OnClick="btnTransfer_Click" CssClass="btn" />
    </div>
  </div>
</asp:Content>
```

```
QueryStringExample.aspx.vb:
Public Class QueryStringExample
  Inherits System.Web.UI.Page
  Protected Sub btnRedirect_Click(sender As Object, e As EventArgs)
    'Use Response.Redirect to pass data via QueryString
    Dim name As String = txtName.Text
    Dim age As String = txtAge.Text
    Response.Redirect("QueryStringReceiver.aspx?name=" & Server.UrlEncode(name) &
"&age=" & Server.UrlEncode(age))
  End Sub
  Protected Sub btnTransfer Click(sender As Object, e As EventArgs)
    'Use Server.Transfer to pass data via QueryString
    Dim name As String = txtName.Text
    Dim age As String = txtAge.Text
    Server.Transfer("QueryStringReceiver.aspx?name=" & Server.UrlEncode(name) &
"&age=" & Server.UrlEncode(age))
  End Sub
End Class
QueryStringReceiver.aspx:
<%@ Page Title="" Language="vb" AutoEventWireup="false"</p>
MasterPageFile="~/Site1.Master" CodeBehind="QueryStringReceiver.aspx.vb"
Inherits="vtp.QueryStringReceiver" %>
<asp:Content ID="Content1" ContentPlaceHolderID="head" runat="server">
</asp:Content>
<asp:Content ID="Content2" ContentPlaceHolderID="MainContent" runat="server">
```

```
<style>
  .result-container {
    background-color: #fff;
    padding: 30px 40px;
    border-radius: 10px;
    box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
    max-width: 500px;
    margin: auto;
    margin-top: 30px;
    text-align: center;
  }
  .result-header {
    font-weight: bold;
    font-size: 18px;
    margin-bottom: 20px;
    color: #007BFF;
  }
  .result-text {
    font-size: 14pt;
    color: #333;
    margin-bottom: 10px;
  }
</style>
<div class="result-container">
  <h2 class="result-header">Received Data from QueryString</h2>
```

```
<asp:Label ID="lblName" runat="server" CssClass="result-text"></asp:Label><br />
    <asp:Label ID="lblAge" runat="server" CssClass="result-text"></asp:Label>
  </div>
</asp:Content>
QueryStringReceiver.aspx.vb:
Public Class QueryStringReceiver
  Inherits System.Web.UI.Page
  Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load
    ' Read data from QueryString and display it
    If Not IsPostBack Then
      If Request.QueryString("name") IsNot Nothing Then
        lblName.Text = "Name: " & Server.UrlDecode(Request.QueryString("name"))
      End If
      If Request.QueryString("age") IsNot Nothing Then
        lblAge.Text = "Age: " & Server.UrlDecode(Request.QueryString("age"))
      End If
    End If
  End Sub
End Class
Output:
```





10. Develop a web form that will keep the records of visitors I museum that save the visitors information such as Name, Gender, Time of visit, date of visit and contact no. Display all visitors data in gridview control order by date of visited and give search record using contact no.

ANS:

Visitors.aspx:

<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="Visitors.aspx.vb"</p> Inherits="vtp.Visitors" %> <!DOCTYPE html> <html xmlns="http://www.w3.org/1999/xhtml"> <head runat="server"> <title>Museum Visitor Records</title> <style> body { font-family: 'Segoe UI', Tahoma, Geneva, Verdana, sans-serif; background-color: #f0f0f0; margin: 0; padding: 0; } .form-container { background-color: #fff; padding: 30px 40px; border-radius: 10px; box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1); max-width: 600px; margin: 50px auto; } .form-header { font-weight: bold; font-size: 18px; text-align: center;

```
margin-bottom: 20px;
 color: #007BFF;
}
.form-group {
 margin-bottom: 20px;
}
.form-group label {
 font-weight: bold;
 display: block;
 margin-bottom: 5px;
 font-size: 12pt;
}
.form-group input[type="text"], .form-group select {
  width: 100%;
 padding: 8px;
 font-size: 12pt;
 border-radius: 5px;
 border: 1px solid #ccc;
 box-sizing: border-box;
}
.form-group button {
 padding: 10px 20px;
 font-size: 12pt;
 color: #fff;
```

```
background-color: #007BFF;
 border: none;
 border-radius: 5px;
 cursor: pointer;
 margin-right: 10px;
 transition: background-color 0.3s;
}
.form-group button:hover {
 background-color: #0056b3;
}
.grid-container {
 max-width: 800px;
 margin: 30px auto;
 background-color: #fff;
 padding: 20px;
 border-radius: 10px;
 box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
}
.search-container {
 max-width: 600px;
 margin: 30px auto;
 text-align: center;
}
.grid-view {
```

```
width: 100%;
      border-collapse: collapse;
    }
    .grid-view th, .grid-view td {
      padding: 10px;
      border: 1px solid #ddd;
      text-align: left;
    }
    .grid-view th {
      background-color: #007BFF;
      color: white;
    }
    .grid-view tr:nth-child(even) {
      background-color: #f2f2f2;
    }
    .error-label {
      color: red;
      font-size: 12pt;
    }
  </style>
</head>
<body>
  <form id="form1" runat="server">
    <div class="form-container">
```

```
<h2 class="form-header">Visitor Information</h2>
      <div class="form-group">
        <label for="txtName">Name:</label>
        <asp:TextBox ID="txtName" runat="server"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvName" runat="server"
ControlToValidate="txtName" ErrorMessage="Name is required." ForeColor="Red"
Display="Dynamic" />
      </div>
      <div class="form-group">
        <label for="ddlGender">Gender:</label>
        <asp:DropDownList ID="ddlGender" runat="server">
          <asp:ListItem Text="Select Gender" Value=""></asp:ListItem>
          <asp:ListItem Text="Male" Value="Male"></asp:ListItem>
          <asp:ListItem Text="Female" Value="Female"></asp:ListItem>
          <asp:ListItem Text="Other" Value="Other"></asp:ListItem>
        </asp:DropDownList>
        <asp:RequiredFieldValidator ID="rfvGender" runat="server"
ControlToValidate="ddlGender" InitialValue="" ErrorMessage="Gender is required."
ForeColor="Red" Display="Dynamic" />
      </div>
      <div class="form-group">
        <label for="txtTimeOfVisit">Time of Visit:</label>
        <asp:TextBox ID="txtTimeOfVisit" runat="server" TextMode="Time"
placeholder="HH:mm"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvTimeOfVisit" runat="server"</pre>
ControlToValidate="txtTimeOfVisit" ErrorMessage="Time of Visit is required."
ForeColor="Red" Display="Dynamic" />
      </div>
      <div class="form-group">
        <label for="txtDateOfVisit">Date of Visit:</label>
```

```
<asp:TextBox ID="txtDateOfVisit" runat="server" TextMode="Date"
placeholder="yyyy-MM-dd"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvDateOfVisit" runat="server"
ControlToValidate="txtDateOfVisit" ErrorMessage="Date of Visit is required."
ForeColor="Red" Display="Dynamic" />
      </div>
      <div class="form-group">
        <label for="txtContactNo">Contact No:</label>
        <asp:TextBox ID="txtContactNo" runat="server"></asp:TextBox>
        <asp:RequiredFieldValidator ID="rfvContactNo" runat="server"
ControlToValidate="txtContactNo" ErrorMessage="Contact No is required."
ForeColor="Red" Display="Dynamic" />
      </div>
      <div class="form-group">
        <asp:Button ID="btnAddVisitor" runat="server" Text="Add Visitor"
OnClick="btnAddVisitor_Click" CssClass="btn" />
        <br />
        <asp:Label ID="lblError" runat="server" CssClass="error-label" />
      </div>
    </div>
    <div class="search-container">
      <label for="txtSearchContact">Search by Contact No:</label>
      <asp:TextBox ID="txtSearchContact" runat="server"></asp:TextBox>
      <asp:Button ID="btnSearch" runat="server" Text="Search"
OnClick="btnSearch_Click" CssClass="btn" />
    </div>
    <div class="grid-container">
```

```
<asp:GridView ID="gvVisitors" runat="server" AutoGenerateColumns="False"
AllowPaging="True" PageSize="5" OnPageIndexChanging="gvVisitors_PageIndexChanging"
CssClass="grid-view">
        <Columns>
          <asp:BoundField DataField="Name" HeaderText="Name" />
          <asp:BoundField DataField="Gender" HeaderText="Gender" />
          <asp:BoundField DataField="TimeOfVisit" HeaderText="Time of Visit"
DataFormatString="{0:HH:mm}" />
          <asp:BoundField DataField="DateOfVisit" HeaderText="Date of Visit"
DataFormatString="{0:yyyy-MM-dd}" />
          <asp:BoundField DataField="ContactNo" HeaderText="Contact No" />
        </Columns>
      </asp:GridView>
    </div>
  </form>
</body>
</html>
Visitors.aspx.vb:
Imports System.Data.SqlClient
Public Class Visitors
 Inherits System.Web.UI.Page
  Private connectionString As String = "Data Source=(localdb)\MSSQLLocalDB;Initial
Catalog=temp;Integrated Security=True;Connect
Timeout=30;Encrypt=False;TrustServerCertificate=False;" 'Replace with your actual
```

connection string

```
Protected Sub Page_Load(ByVal sender As Object, ByVal e As System.EventArgs) Handles
Me.Load
    If Not IsPostBack Then
      BindGridView()
    End If
  End Sub
  Private Sub BindGridView()
    Try
      Using conn As New SqlConnection(connectionString)
        Using cmd As New SqlCommand("SELECT Name, Gender, TimeOfVisit,
DateOfVisit, ContactNo FROM Visitors ORDER BY DateOfVisit DESC", conn)
          conn.Open()
          Dim dt As New DataTable()
          Dim adapter As New SqlDataAdapter(cmd)
          adapter.Fill(dt)
          ' Debugging: Check the contents of DataTable
          For Each row As DataRow In dt.Rows
            Console.WriteLine("Name: {0}, Gender: {1}, TimeOfVisit: {2}, DateOfVisit: {3},
ContactNo: {4}",
                     row("Name"), row("Gender"), row("TimeOfVisit"),
row("DateOfVisit"), row("ContactNo"))
          Next
          gvVisitors.DataSource = dt
          gvVisitors.DataBind()
        End Using
      End Using
    Catch ex As FormatException
```

```
lblError.Text = "Data format error: " & ex.Message
     IblError.ForeColor = System.Drawing.Color.Red
    Catch ex As Exception
     IblError.Text = "An unexpected error occurred: " & ex.Message
     IblError.ForeColor = System.Drawing.Color.Red
    End Try
  End Sub
 Protected Sub btnAddVisitor_Click(ByVal sender As Object, ByVal e As EventArgs)
    Try
      Dim name As String = txtName.Text.Trim()
      Dim gender As String = ddlGender.SelectedValue
      Dim timeOfVisit As String = txtTimeOfVisit.Text.Trim()
      Dim dateOfVisit As String = txtDateOfVisit.Text.Trim()
      Dim contactNo As String = txtContactNo.Text.Trim()
      Using conn As New SqlConnection(connectionString)
        Using cmd As New SqlCommand("INSERT INTO Visitors (Name, Gender,
TimeOfVisit, DateOfVisit, ContactNo) VALUES (@Name, @Gender, @TimeOfVisit,
@DateOfVisit, @ContactNo)", conn)
          cmd.Parameters.AddWithValue("@Name", name)
          cmd.Parameters.AddWithValue("@Gender", gender)
          cmd.Parameters.AddWithValue("@TimeOfVisit", timeOfVisit)
          cmd.Parameters.AddWithValue("@DateOfVisit", dateOfVisit)
          cmd.Parameters.AddWithValue("@ContactNo", contactNo)
          conn.Open()
          cmd.ExecuteNonQuery()
        End Using
```

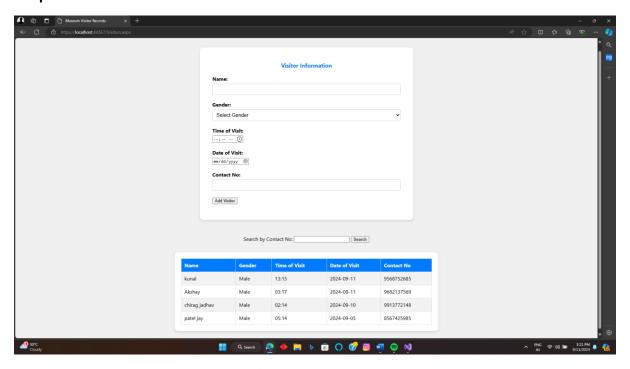
End Using ' Clear form and re-bind grid txtName.Text = "" ddlGender.SelectedIndex = 0 txtTimeOfVisit.Text = "" txtDateOfVisit.Text = "" txtContactNo.Text = "" BindGridView() Catch ex As FormatException IblError.Text = "Data format error: " & ex.Message lblError.ForeColor = System.Drawing.Color.Red **Catch ex As Exception** IblError.Text = "An unexpected error occurred: " & ex.Message lblError.ForeColor = System.Drawing.Color.Red **End Try End Sub** Protected Sub btnSearch_Click(ByVal sender As Object, ByVal e As EventArgs) Try Dim contactNo As String = txtSearchContact.Text.Trim() Using conn As New SqlConnection(connectionString) Using cmd As New SqlCommand("SELECT Name, Gender, TimeOfVisit, DateOfVisit, ContactNo FROM Visitors WHERE ContactNo LIKE @ContactNo ORDER BY DateOfVisit DESC", conn)

cmd.Parameters.AddWithValue("@ContactNo", "%" & contactNo & "%")

```
conn.Open()
          Dim dt As New DataTable()
          Dim adapter As New SqlDataAdapter(cmd)
          adapter.Fill(dt)
          gvVisitors.DataSource = dt
          gvVisitors.DataBind()
        End Using
      End Using
    Catch ex As FormatException
      lblError.Text = "Data format error: " & ex.Message
      IblError.ForeColor = System.Drawing.Color.Red
    Catch ex As Exception
      IblError.Text = "An unexpected error occurred: " & ex.Message
      lblError.ForeColor = System.Drawing.Color.Red
    End Try
  End Sub
  Protected Sub gvVisitors_PageIndexChanging(ByVal sender As Object, ByVal e As
GridViewPageEventArgs)
    gvVisitors.PageIndex = e.NewPageIndex
    BindGridView()
  End Sub
End Class
Visitors table:
```



Output:



11. Develop a e-commerce website for shoes. Use session and cookies. Provide facility Signup, Login and order a product.

ANS:

Signup.aspx:

<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="Signup.aspx.vb"
Inherits="vtp.Signup" %>

<!DOCTYPE html>

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

```
<head runat="server">
  <title>Signup</title>
  <link rel="stylesheet" type="text/css" href="StyleSheet2.css">
</head>
<body>
 <div class="container">
    <h2>Signup</h2>
    <form id="form1" runat="server">
      <asp:TextBox ID="txtUsername" runat="server" Placeholder="Username" />
      <asp:TextBox ID="txtEmail" runat="server" Placeholder="Email" />
      <asp:TextBox ID="txtPassword" runat="server" TextMode="Password"
Placeholder="Password" />
      <asp:Button ID="btnSignup" runat="server" Text="Signup"
OnClick="btnSignup_Click" Height="33px" />
    </form>
  </div>
</body>
</html>
Signup.aspx.vb:
Imports System.Data.SqlClient
Imports System.Security.Cryptography
Imports System.Text
Public Class Signup
  Inherits System.Web.UI.Page
```

Protected Sub btnSignup_Click(sender As Object, e As EventArgs) Handles btnSignup.Click

'Corrected connection string

Dim connString As String = "Data Source=(localdb)\MSSQLLocalDB;Initial Catalog=e-commerce;Integrated Security=True;Connect Timeout=30;Encrypt=False"

```
Using conn As New SqlConnection(connString)
      conn.Open()
      Dim passwordHash As String = GetHashedPassword(txtPassword.Text)
      Dim cmd As New SqlCommand("INSERT INTO Users (Username, Email,
PasswordHash) VALUES (@Username, @Email, @PasswordHash)", conn)
      cmd.Parameters.AddWithValue("@Username", txtUsername.Text)
     cmd.Parameters.AddWithValue("@Email", txtEmail.Text)
      cmd.Parameters.AddWithValue("@PasswordHash", passwordHash)
     cmd.ExecuteNonQuery()
    End Using
  End Sub
  Private Function GetHashedPassword(password As String) As String
    Using sha256 As SHA256 = SHA256.Create()
      Dim bytes As Byte() = sha256.ComputeHash(Encoding.UTF8.GetBytes(password))
      Dim builder As New StringBuilder()
     For Each b As Byte In bytes
        builder.Append(b.ToString("x2"))
      Next
      Return builder.ToString()
    End Using
  End Function
End Class
```

```
User_login.aspx:
<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="User_Login.aspx.vb"</p>
Inherits="vtp.User_Login" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
 <title>Login</title>
 k rel="stylesheet" type="text/css" href="StyleSheet2.css">
</head>
<body>
 <div class="container">
    <h2>Login</h2>
    <form id="form1" runat="server">
      <asp:TextBox ID="txtUsername" runat="server" Placeholder="Username" />
      <asp:TextBox ID="txtPassword" runat="server" TextMode="Password"
Placeholder="Password" />
      <asp:CheckBox ID="chkRememberMe" runat="server" Text="Remember me" />
      <asp:Button ID="btnLogin" runat="server" Text="Login" OnClick="btnLogin_Click"</pre>
Height="33px"/>
      <a href="Signup.aspx">sign up</a>
    </form>
 </div>
</html>
User_login.aspx.vb:
```

```
Imports System.Data.SqlClient
Imports System.Security.Cryptography
Public Class User Login
  Inherits System.Web.UI.Page
 Protected Sub btnLogin_Click(sender As Object, e As EventArgs) Handles btnLogin.Click
    Dim connString As String = "Data Source=(localdb)\MSSQLLocalDB;Initial Catalog=e-
commerce;Integrated Security=True;Connect Timeout=30;Encrypt=False"
    Using conn As New SqlConnection(connString)
      conn.Open()
      Dim passwordHash As String = GetHashedPassword(txtPassword.Text)
      Dim cmd As New SqlCommand("SELECT UserID FROM Users WHERE Username =
@Username AND PasswordHash = @PasswordHash", conn)
      cmd.Parameters.AddWithValue("@Username", txtUsername.Text)
      cmd.Parameters.AddWithValue("@PasswordHash", passwordHash)
      Dim result As Object = cmd.ExecuteScalar()
      If result IsNot Nothing Then
        'Login successful
        Dim userId As Integer = Convert.ToInt32(result)
        Session("UserID") = userId
        If chkRememberMe.Checked Then
          Dim userCookie As New HttpCookie("UserID", userId.ToString())
          userCookie.Expires = DateTime.Now.AddDays(7)
          Response.Cookies.Add(userCookie)
        End If
```

```
Response.Redirect("Products.aspx")
      Else
        ' Login failed
        Response.Write("Invalid username or password.")
      End If
    End Using
  End Sub
  Private Function GetHashedPassword(password As String) As String
    Using sha256 As SHA256 = SHA256.Create()
      Dim bytes As Byte() = sha256.ComputeHash(Encoding.UTF8.GetBytes(password))
      Dim builder As New StringBuilder()
      For Each b As Byte In bytes
        builder.Append(b.ToString("x2"))
      Next
      Return builder.ToString()
    End Using
  End Function
End Class
Products.aspx:
<%@ Page Language="vb" AutoEventWireup="false" CodeBehind="Products.aspx.vb"</p>
Inherits="vtp.Products" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
```

```
<title>Products</title>
<style>
  body {
    font-family: Arial, sans-serif;
    background-color: #f4f4f4;
    margin: 0;
    padding: 0;
  }
  .container {
    width: 90%;
    margin: auto;
    overflow: hidden;
    background: #fff;
    padding: 20px;
    box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
    margin-top: 50px;
  }
  .header {
    display: flex;
    justify-content: space-between;
    align-items: center;
    border-bottom: 2px solid #ddd;
    padding-bottom: 10px;
    margin-bottom: 20px;
  }
```

```
.header-title {
      font-size: 1.8em;
      color: #333;
      margin: 0;
    }
    .header-username {
      font-size: 1em;
      color: #666;
    }
    .product-list {
      display: grid;
      grid-template-columns: repeat(auto-fill, minmax(250px, 1fr)); /* Responsive
columns */
      gap: 20px;
    }
    .product-item {
      background: #fff;
      border-radius: 8px;
      box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
      overflow: hidden;
      transition: box-shadow 0.3s ease, transform 0.3s ease;
      text-align: center;
      padding: 10px;
      display: flex;
      flex-direction: column;
      align-items: center;
```

```
border: 1px solid #ddd; /* Border to simulate table cell */
}
.product-item img {
  width: 100%;
  height: 200px; /* Set a fixed height for images */
  object-fit: cover;
  transition: transform 0.3s ease, filter 0.3s ease;
}
.product-item:hover {
  box-shadow: 0 8px 16px rgba(0, 0, 0, 0.2);
  transform: translateY(-5px);
}
.product-item:hover img {
  transform: scale(1.05);
  filter: grayscale(50%);
}
.product-item h3 {
  font-size: 1.2em;
  margin: 10px 0;
  color: #333;
  text-transform: uppercase;
  letter-spacing: 1px;
}
```

```
.product-item p {
  color: #666;
 line-height: 1.4;
 margin: 0 0 10px;
}
.order-button {
  background: #28a745;
  border: none;
 color: #fff;
 padding: 10px 20px;
 border-radius: 5px;
  cursor: pointer;
 font-size: 14px;
 transition: background 0.3s ease, transform 0.3s ease;
 margin-top: auto; /* Pushes the button to the bottom of the container */
}
.order-button:hover {
 background: #218838;
 transform: scale(1.05);
}
@media (max-width: 768px) {
  .container {
    width: 95%;
    padding: 10px;
 }
```

```
.product-list {
        grid-template-columns: 1fr; /* Single column on small screens */
      }
      .order-button {
        padding: 8px 16px;
        font-size: 14px;
     }
    }
  </style>
</head>
<body>
  <form id="form1" runat="server">
    <div class="container">
      <div class="header">
        <h1 class="header-title">Available Shoes</h1>
        <div class="header-username">
          Welcome, <%# UserName %>!
        </div>
      </div>
      <div class="product-list">
        <asp:Repeater ID="rptProducts" runat="server">
          <ItemTemplate>
            <div class="product-item">
              <img src='<%# ResolveUrl("~/" + Eval("ImageURL").ToString()) %>' alt='<%#
Eval("ProductName") %>' />
              <h3><%# Eval("ProductName") %></h3>
              <%# Eval("Description") %>
```

```
Price: $<%# Eval("Price") %>
              <asp:Button ID="btnOrder" runat="server" Text="Order"
CommandArgument='<%# Eval("ProductID") %>' OnClick="btnOrder_Click"
CssClass="order-button" />
            </div>
          /ItemTemplate>
        </asp:Repeater>
      </div>
    </div>
 </form>
</body>
</html>
Product.aspx.vb:
Imports System.Data.SqlClient
Public Class Products
 Inherits System.Web.UI.Page
 Public ReadOnly Property UserName As String
    Get
      'Check if the session contains the user ID
     If Session("UserID") IsNot Nothing Then
        Dim userId As Integer = Convert.ToInt32(Session("UserID"))
        Return GetUserName(userId)
     Else
        Return "Guest"
      End If
```

```
End Get
  End Property
  Private Function GetUserName(userId As Integer) As String
    Dim connString As String = "Data Source=(localdb)\MSSQLLocalDB;Initial Catalog=e-
commerce;Integrated Security=True;Connect Timeout=30;Encrypt=False"
    Using conn As New SqlConnection(connString)
      conn.Open()
      Dim cmd As New SqlCommand("SELECT Username FROM Users WHERE UserID =
@UserID", conn)
      cmd.Parameters.AddWithValue("@UserID", userId)
      Dim result As Object = cmd.ExecuteScalar()
      If result IsNot Nothing Then
        Return result.ToString()
      Else
        Return "Guest"
      End If
    End Using
  End Function
  Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load
    If Not IsPostBack Then
      LoadProducts()
    End If
  End Sub
  Private Sub LoadProducts()
    Dim connString As String = "Data Source=(localdb)\MSSQLLocalDB;Initial Catalog=e-
commerce;Integrated Security=True;Connect Timeout=30;Encrypt=False"
```

```
Using conn As New SqlConnection(connString)
      conn.Open()
      Dim cmd As New SqlCommand("SELECT * FROM Products", conn)
      Dim reader As SqlDataReader = cmd.ExecuteReader()
      rptProducts.DataSource = reader
      rptProducts.DataBind()
    End Using
  End Sub
 Protected Sub btnOrder Click(sender As Object, e As EventArgs)
    Dim productId As Integer = Convert.ToInt32(CType(sender,
Button).CommandArgument)
    Dim userId As Integer = Convert.ToInt32(Session("UserID"))
    Dim connString As String = "Data Source=(localdb)\MSSQLLocalDB;Initial Catalog=e-
commerce;Integrated Security=True;Connect Timeout=30;Encrypt=False"
    Using conn As New SqlConnection(connString)
      conn.Open()
      Dim cmd As New SqlCommand("INSERT INTO Orders (UserID, ProductID, Quantity)
OUTPUT INSERTED.OrderID VALUES (@UserID, @ProductID, 1)", conn)
      cmd.Parameters.AddWithValue("@UserID", userId)
      cmd.Parameters.AddWithValue("@ProductID", productId)
      Dim orderId As Integer = Convert.ToInt32(cmd.ExecuteScalar())
      Response.Redirect("OrderConfirmation.aspx?OrderID=" & orderId)
    End Using
  End Sub
End Class
```

OrderConfirmation.aspx:

```
<%@ Page Language="vb" AutoEventWireup="false"</pre>
CodeBehind="OrderConfirmation.aspx.vb" Inherits="vtp.OrderConfirmation" %>
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
 <title>Order Confirmation</title>
 k rel="stylesheet" type="text/css" href="StyleSheet2.css">
</head>
<body>
 <form id="form1" runat="server">
    <div class="container">
      <h2>Order Confirmation</h2>
      <asp:Literal ID="litOrderDetails" runat="server"></asp:Literal>
      <asp:Button ID="btnContinueShopping" runat="server" Text="Continue Shopping"
PostBackUrl="Products.aspx" />
    </div>
 </form>
</body>
</html>
OrderConfirmation.aspx.vb:
Imports System.Data.SqlClient
Public Class OrderConfirmation
```

```
Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load
   If Not IsPostBack Then
     DisplayOrderDetails()
   End If
  End Sub
  Private Sub DisplayOrderDetails()
   Dim connString As String = "Data Source=(localdb)\MSSQLLocalDB;Initial Catalog=e-
commerce;Integrated Security=True;Connect Timeout=30;Encrypt=False"
   Dim userId As Integer = Convert.ToInt32(Session("UserID"))
   Dim orderId As Integer = Convert.ToInt32(Request.QueryString("OrderID"))
   Using conn As New SqlConnection(connString)
     conn.Open()
     Dim cmd As New SqlCommand("SELECT p.ProductName, o.Quantity, p.Price FROM
Orders o JOIN Products p ON o.ProductID = p.ProductID WHERE o.OrderID = @OrderID
AND o.UserID = @UserID", conn)
     cmd.Parameters.AddWithValue("@OrderID", orderId)
     cmd.Parameters.AddWithValue("@UserID", userId)
     Dim reader As SqlDataReader = cmd.ExecuteReader()
     Dim orderDetails As New StringBuilder()
     If reader. Has Rows Then
       orderDetails.Append("<h3>Order Details:</h3>")
       orderDetails.Append("Product
NameQuantityPriceTotal
```

Inherits System.Web.UI.Page

```
Dim totalAmount As Decimal = 0
       While reader.Read()
         Dim productName As String = reader("ProductName").ToString()
         Dim quantity As Integer = Convert.ToInt32(reader("Quantity"))
         Dim price As Decimal = Convert.ToDecimal(reader("Price"))
         Dim total As Decimal = quantity * price
         totalAmount += total
orderDetails.AppendFormat("{0}{1}${2}${3}
tr>", productName, quantity, price, total)
       End While
       orderDetails.AppendFormat("<strong>Total
Amount</strong>${0}", totalAmount)
       orderDetails.Append("")
     Else
       orderDetails.Append("No details found for this order.")
     End If
     litOrderDetails.Text = orderDetails.ToString()
   End Using
 End Sub
End Class
StyleSheet2.css:
body {
 font-family: Arial, sans-serif;
```

```
background-color: #f4f4f4;
  margin: 0;
  padding: 0;
}
.container {
  width: 80%;
  margin: auto;
  overflow: hidden;
  background: #fff;
  padding: 20px;
  box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);
  margin-top: 50px;
}
h2 {
  text-align: center;
  color: #333;
}
form {
  display: flex;
  flex-direction: column;
}
input[type="text"], input[type="password"] {
  padding: 10px;
  margin: 10px 0;
```

```
border: 1px solid #ddd;
  border-radius: 5px;
}
button {
  padding: 10px;
  border: none;
  border-radius: 5px;
  background-color: #28a745;
  color: #fff;
  cursor: pointer;
}
  button:hover {
    background-color: #218838;
  }
.product-item {
  background: #fff;
  border-radius: 8px;
  box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
  overflow: hidden;
  margin: 15px;
  transition: box-shadow 0.3s ease, transform 0.3s ease;
}
  .product-item img {
    width: 200px;
```

```
height: 200px;
    transition: transform 0.3s ease, filter 0.3s ease;
  }
  .product-item:hover {
    box-shadow: 0 8px 16px rgba(0, 0, 0, 0.2);
    transform: translateY(-5px);
  }
    .product-item:hover img {
      transform: scale(1.1);
      filter: grayscale(50%);
    }
  .product-item h3 {
    font-size: 1.2em;
    margin: 10px 0;
    color: #333;
    text-transform: uppercase;
    letter-spacing: 1px;
  }
  .product-item p {
    color: #666;
    line-height: 1.4;
  }
.order-button {
```

```
background: #28a745;
  border: none;
  color: #fff;
  padding: 10px 20px;
  border-radius: 5px;
  cursor: pointer;
  font-size: 16px;
  transition: background 0.3s ease, transform 0.3s ease;
}
  .order-button:hover {
    background: #218838;
    transform: scale(1.05);
  }
@media (max-width: 768px) {
  .container {
    width: 95%;
    padding: 10px;
  }
  .product-item {
    margin: 10px 0;
    width: 100%;
  }
    .product-item img {
      width: 100%;
```

```
height: auto;
    }
  .order-button {
    padding: 8px 16px;
    font-size: 14px;
  }
}
/* Loading spinner for product loading */
.loading-spinner {
  border: 4px solid rgba(0, 0, 0, 0.1);
  border-radius: 50%;
  border-top: 4px solid #28a745;
  width: 40px;
  height: 40px;
  animation: spin 1s linear infinite;
  margin: auto;
  display: block;
}
@keyframes spin {
  0% {
    transform: rotate(0deg);
  }
  100% {
    transform: rotate(360deg);
```

} }

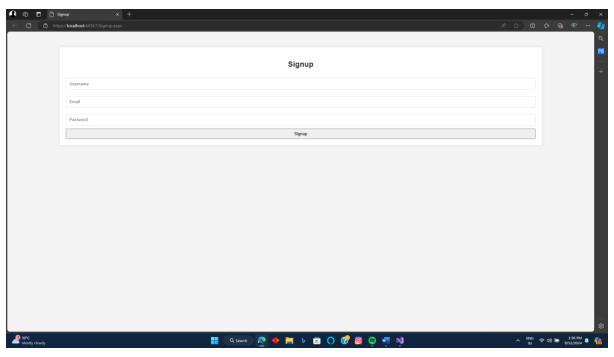
Tables:

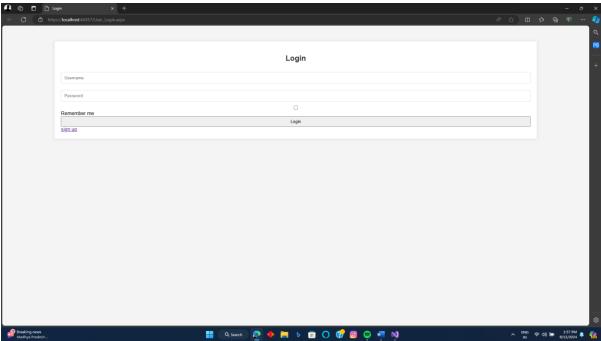
chirag jadhav 8b7	
Crimay judnav OD7	7293f6dd938 jadhavchirag48
2 kunal f5cl	b9433ec112 kunal123@gma
3 hitesh fdd	1528d8e5d66 hitesh54@gmai
4 Akshay 6e3	3209b80194 Akshay32@gm
NULL NULL NU	ILL NULL

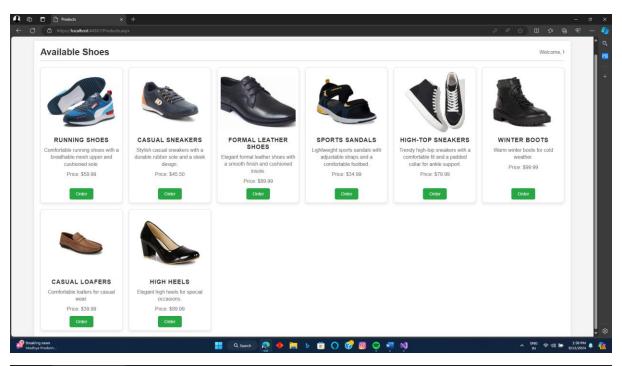
	ProductID	ProductName	Price	Description	ImageURL
>	1	Running Shoes	59.99	Comfortable ru	image/1.jpg
	2	Casual Sneakers	45.50	Stylish casual s	image/2.jpg
	3	Formal Leather	89.99	Elegant formal I	image/3.jpg
	4	Sports Sandals	34.99	Lightweight sp	image/4.jpg
	5	High-Top Snea	79.99	Trendy high-to	image/5.jpg
	6	Winter Boots	99.99	Warm winter b	image/6.jpg
	7	Casual Loafers	39.99	Comfortable lo	image/7.jpg
	8	High Heels	89.99	Elegant high he	image/8.jpg
Φ	NULL	NULL	NULL	NULL	NULL

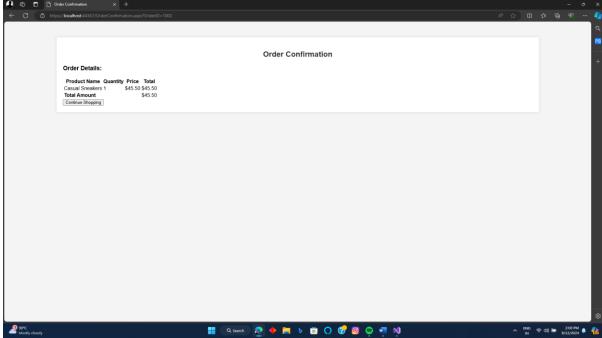
	OrderlD	UserID	ProductID	OrderDate	Quantity
₽	1	2	6	9/12/2024 1:09:	1
	2	2	5	9/12/2024 1:09:	1
0	NULL	NULL	NULL	NULL	NULL

Output:









12. Develop a web form that will keep the records of Laptop with details like Unique ID, Name of brand, model, RAM, Price. Provide following facility of Add New Laptop, Update Laptop Details, Delete Laptop and View All Laptop details in Gridview Control.

ANS:

Laptops.aspx:

<@@ Page Language="vb" AutoEventWireup="false" CodeBehind="Laptops.aspx.vb" Inherits="vtp.Laptops" %> <!DOCTYPE html> <html xmlns="http://www.w3.org/1999/xhtml"> <head runat="server"> <title>Laptop Management</title> <style> body { font-family: Arial, sans-serif; background-color: #f0f0f0; margin: 0; padding: 0; } .container { width: 60%; margin: 50px auto; background-color: #fff; padding: 20px; box-shadow: 0 0 10px rgba(0, 0, 0, 0.1); } h2 { text-align: center; margin-bottom: 20px;

}

```
.input-section {
  margin-bottom: 20px;
  display: grid;
  grid-template-columns: 1fr 2fr;
  gap: 10px;
}
input[type="text"] {
  padding: 8px;
  border: 1px solid #ccc;
  border-radius: 4px;
  width: 100%;
}
button, .aspbutton {
  padding: 10px 20px;
  background-color: #007bff;
  color: #fff;
  border: none;
  border-radius: 4px;
  cursor: pointer;
}
button:hover, .aspbutton:hover {
  background-color: #0056b3;
}
.gridview {
```

```
width: 100%;
      border-collapse: collapse;
    }
    .gridview th, .gridview td {
      padding: 10px;
      border: 1px solid #ddd;
      text-align: left;
    }
    .gridview th {
      background-color: #f4f4f4;
    }
  </style>
</head>
<body>
  <form id="form1" runat="server">
    <div class="container">
      <h2>Laptop Management</h2>
      <div class="input-section">
        <asp:Label ID="lblBrand" runat="server" Text="Brand Name:"
AssociatedControlID="txtBrand"></asp:Label>
        <asp:TextBox ID="txtBrand" runat="server" Width="678px"></asp:TextBox>
        <asp:Label ID="lblModel" runat="server" Text="Model:"
AssociatedControlID="txtModel"></asp:Label>
        <asp:TextBox ID="txtModel" runat="server" Width="677px"></asp:TextBox>
```

```
<asp:Label ID="lblRAM" runat="server" Text="RAM:"
AssociatedControlID="txtRAM"></asp:Label>
        <asp:TextBox ID="txtRAM" runat="server" Width="678px"></asp:TextBox>
        <asp:Label ID="lblPrice" runat="server" Text="Price:"
AssociatedControlID="txtPrice"></asp:Label>
        <asp:TextBox ID="txtPrice" runat="server" Width="677px"></asp:TextBox>
        <asp:Button ID="btnAdd" runat="server" Text="Add New Laptop"
OnClick="btnAdd_Click" Height="33px" />
        <asp:Button ID="btnUpdate" runat="server" Text="Update Laptop Details"
OnClick="btnUpdate_Click" Height="33px" Width="372px" />
        <asp:Button ID="btnDelete" runat="server" Text="Delete Laptop"
OnClick="btnDelete_Click" Height="32px" />
      </div>
      <asp:GridView ID="gvLaptops" runat="server" AutoGenerateColumns="False"
CssClass="gridview"
      OnSelectedIndexChanged="gvLaptops_SelectedIndexChanged">
  <Columns>
    <asp:BoundField DataField="LaptopID" HeaderText="Laptop ID" ReadOnly="True" />
    <asp:BoundField DataField="Brand" HeaderText="Brand" />
    <asp:BoundField DataField="Model" HeaderText="Model" />
    <asp:BoundField DataField="RAM" HeaderText="RAM" />
    <asp:BoundField DataField="Price" HeaderText="Price" />
    <asp:CommandField ShowSelectButton="True" SelectText="Select" />
  </Columns>
</asp:GridView>
    </div>
```

```
</form>
</body>
</html>
Laptops.aspx.vb:
Imports System.Data.SqlClient
Public Class Laptops
 Inherits System.Web.UI.Page
 Dim connectionString As String = "Data Source=(localdb)\MSSQLLocalDB;Initial
Catalog=e-commerce;Integrated Security=True;Connect Timeout=30;Encrypt=False"
 Protected Sub Page_Load(ByVal sender As Object, ByVal e As EventArgs) Handles
Me.Load
    If Not IsPostBack Then
     LoadLaptops()
    End If
  End Sub
 Private Sub LoadLaptops()
    Using con As New SqlConnection(connectionString)
      Using cmd As New SqlCommand("SELECT * FROM Laptops", con)
        con.Open()
        Dim reader As SqlDataReader = cmd.ExecuteReader()
        gvLaptops.DataSource = reader
        gvLaptops.DataBind()
      End Using
```

```
End Using
  End Sub
  Protected Sub btnAdd Click(ByVal sender As Object, ByVal e As EventArgs)
   Using con As New SqlConnection(connectionString)
      Using cmd As New SqlCommand("INSERT INTO Laptops (Brand, Model, RAM, Price)
VALUES (@Brand, @Model, @RAM, @Price)", con)
       cmd.Parameters.AddWithValue("@Brand", txtBrand.Text)
       cmd.Parameters.AddWithValue("@Model", txtModel.Text)
       cmd.Parameters.AddWithValue("@RAM", txtRAM.Text)
       cmd.Parameters.AddWithValue("@Price", txtPrice.Text)
       con.Open()
       cmd.ExecuteNonQuery()
      End Using
   End Using
   LoadLaptops()
  End Sub
  Protected Sub btnUpdate_Click(ByVal sender As Object, ByVal e As EventArgs)
   Using con As New SqlConnection(connectionString)
      Using cmd As New SqlCommand("UPDATE Laptops SET Brand=@Brand,
Model=@Model, RAM=@RAM, Price=@Price WHERE LaptopID=@LaptopID", con)
       cmd.Parameters.AddWithValue("@Brand", txtBrand.Text)
       cmd.Parameters.AddWithValue("@Model", txtModel.Text)
       cmd.Parameters.AddWithValue("@RAM", txtRAM.Text)
       cmd.Parameters.AddWithValue("@Price", txtPrice.Text)
       cmd.Parameters.AddWithValue("@LaptopID",
gvLaptops.SelectedRow.Cells(0).Text)
       con.Open()
```

```
cmd.ExecuteNonQuery()
      End Using
    End Using
    LoadLaptops()
  End Sub
  Protected Sub btnDelete_Click(ByVal sender As Object, ByVal e As EventArgs)
    Using con As New SqlConnection(connectionString)
      Using cmd As New SqlCommand("DELETE FROM Laptops WHERE
LaptopID=@LaptopID", con)
        cmd.Parameters.AddWithValue("@LaptopID",
gvLaptops.SelectedRow.Cells(0).Text)
        con.Open()
        cmd.ExecuteNonQuery()
      End Using
    End Using
    LoadLaptops()
  End Sub
  Protected Sub gvLaptops_SelectedIndexChanged(ByVal sender As Object, ByVal e As
EventArgs)
    'Ensure the selected row index is valid
    If gvLaptops.SelectedIndex >= 0 Then
      ' Populate textboxes with data from the selected row
      txtBrand.Text = gvLaptops.SelectedRow.Cells(1).Text
      txtModel.Text = gvLaptops.SelectedRow.Cells(2).Text
      txtRAM.Text = gvLaptops.SelectedRow.Cells(3).Text
      txtPrice.Text = gvLaptops.SelectedRow.Cells(4).Text
    End If
```

End Sub

End Class

Table:

	LaptopID	Brand	Model	RAM	Price
⊳	1	hp	victus	8	65000.00
	2	hp	pavilion	8	50000.00
	3	Lenovo	ThinkPad E14	8	61000.00
	4	Apple	MacBook Air M1	8	120000.00
	5	Asus	ZenBook 14	16	81000.00
	6	Microsoft	Surface Laptop	16	75000.00
	7	Samsung	Galaxy Book Pro	8	85000.00
Φ	NULL	NULL	NULL	NULL	NULL

Output:

