

# Question no 01:

## Default.aspx file:

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Default.aspx.vb"
Inherits="EventDemo" %>

<!DOCTYPE html>
<html>
<head runat="server">
  <title>Event Demonstration</title>
</head>

<body>
  <form id="form1" runat="server">
    <asp:Label ID="lblmessage" runat="server"></asp:Label>
    <br /><br />
    <asp:Button ID="btnclick" runat="server" Text="Click" OnClick="btnclick_Click" />
  </form>
</body>
</html>
```

## [Default.aspx.vb](#) file:

Partial Class EventDemo

Inherits System.Web.UI.Page

```
Protected Sub Page_Init(sender As Object, e As EventArgs) Handles Me.Init
  lblmessage.Text &= "Page initialization event handled.<br/>"
End Sub
```

```
Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load
  lblmessage.Text &= "Page load event handled.<br/>"
```

```
  If Page.IsPostBack Then
    lblmessage.Text &= "Page post back event handled.<br/>"
  End If
End Sub
```

```
Protected Sub Page_PreRender(sender As Object, e As EventArgs) Handles Me.PreRender
  lblmessage.Text &= "Page prerender event handled.<br/>"
End Sub
```

```
Protected Sub btnClick_Click(sender As Object, e As EventArgs)
    lblMessage.Text &= "Button click event handled.<br/>"
```

```
End Sub
```

```
End Class
```

---

```
Page initialization event handled.
Page load event handled.
Page prerender event handled.
```

Click

[Web hosting by Somee.com](#)

## Question no 2:

- Debugging helps identify and fix runtime and logic errors quickly.
- It allows step-by-step execution to understand the page life cycle.
- Developers can inspect variables, ViewState, and Session values in real time.
- It highlights the exact line where an exception occurs for easier troubleshooting.
- Overall, debugging improves code accuracy, performance, and reliability.

## Question no 3:

### Cart.aspx

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="cart.aspx.vb" Inherits="cart"
%>
<!DOCTYPE html>
<html>
<head runat="server">
<title>Cart</title>
<link href="style.css" rel="stylesheet" />
</head>
<body>
<form runat="server">
```

```
<header>
<h1>Your Cart</h1>
</header>

<div class="form-box">
<h2>Your Items</h2>

<asp:CheckBox ID="chk1" runat="server" Text="Chair - $5000 | Qty: 1" />
<asp:CheckBox ID="chk2" runat="server" Text="Desk - $10000 | Qty: 2" />

<br /><br />

<asp:Button ID="btnCheckout" runat="server" Text="Checkout" PostBackUrl="payment.aspx" />
<asp:Button ID="btnBack" runat="server" Text="Back" PostBackUrl="order.aspx" />

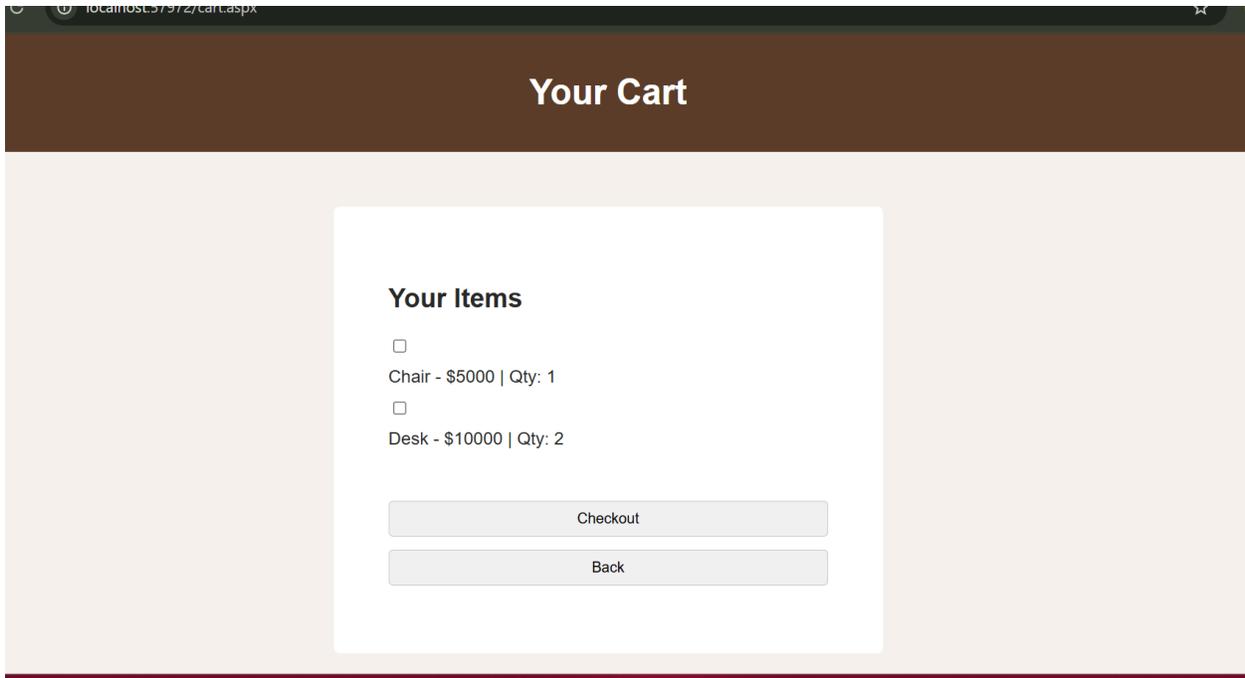
</div>

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

## [cart.aspx.vb](#)

Partial Class cart  
Inherits System.Web.UI.Page

End Class



## Help.aspx

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="help.aspx.vb" Inherits="help"
%>
<!DOCTYPE html>
<html>
<head runat="server">
<title>Help</title>
<link href="style.css" rel="stylesheet" />
</head>
<body>
<form runat="server">

<header>
<h1>Pine Valley Furnishing</h1>
</header>

<ul>
<li>Use menu to navigate pages.</li>
<li>Register before placing order.</li>
<li>Contact support for assistance.</li>
</ul>

<asp:Button ID="btnBack" runat="server" Text="Back" OnClick="btnBack_Click" />
```

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

## [help.aspx.vb](#)

Partial Class help

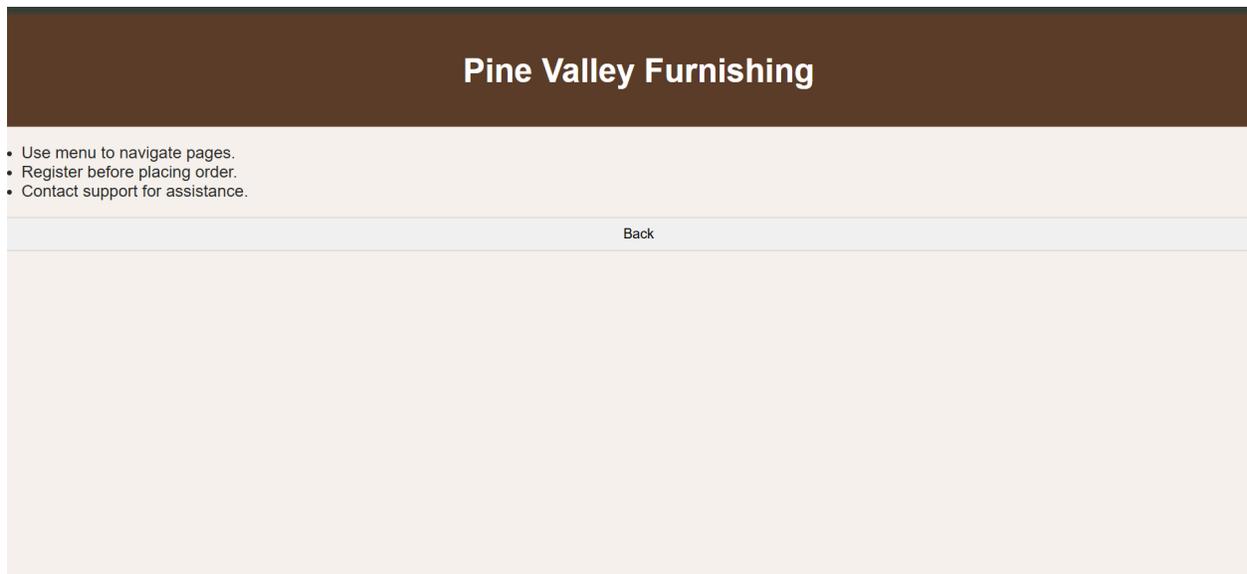
Inherits System.Web.UI.Page

Protected Sub btnBack\_Click(sender As Object, e As EventArgs)

    Response.Redirect("index.aspx")

End Sub

End Class



## Index.aspx

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="index.aspx.vb"
```

```
Inherits="index" %>
```

```
<!DOCTYPE html>
```

```
<html>
```

```
<head runat="server">
```

```
    <title>Pine Valley Furnishing</title>
```

```
    <link href="style.css" rel="stylesheet" />
```

```
</head>
```

```
<body>
```

```
<form runat="server">
```

```
<header>
```

```
<h1>Pine Valley Furnishing</h1>
</header>
```

```
<div class="container">
<div class="menu">
<asp:LinkButton ID="InkSearch" runat="server" OnClick="InkSearch_Click">Search
Product</asp:LinkButton>
<asp:LinkButton ID="InkOrder" runat="server" OnClick="InkOrder_Click">Place
Order</asp:LinkButton>
<asp:LinkButton ID="InkHelp" runat="server" OnClick="InkHelp_Click">Help</asp:LinkButton>
<asp:LinkButton ID="InkLogin" runat="server" OnClick="InkLogin_Click">Login /
Register</asp:LinkButton>
</div>
</div>

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

## [index.aspx.vb](#)

Partial Class index

Inherits System.Web.UI.Page

```
Protected Sub InkSearch_Click(sender As Object, e As EventArgs)
    Response.Redirect("search.aspx")
End Sub
```

```
Protected Sub InkOrder_Click(sender As Object, e As EventArgs)
    Response.Redirect("order.aspx")
End Sub
```

```
Protected Sub InkHelp_Click(sender As Object, e As EventArgs)
    Response.Redirect("help.aspx")
End Sub
```

```
Protected Sub InkLogin_Click(sender As Object, e As EventArgs)
    Response.Redirect("login_as.aspx")
End Sub
```

End Class

## Pine Valley Furnishing

Search Product

Place Order

Help

Login / Register

### Index\_emp.aspx

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="index_emp.aspx.vb"
Inherits="index_emp" %>
<!DOCTYPE html>
<html>
<head runat="server">
<title>Employee Home</title>
<link href="style.css" rel="stylesheet" />
</head>
<body>
<form runat="server">

<header>
<h1>Pine Valley Furnishing</h1>
</header>

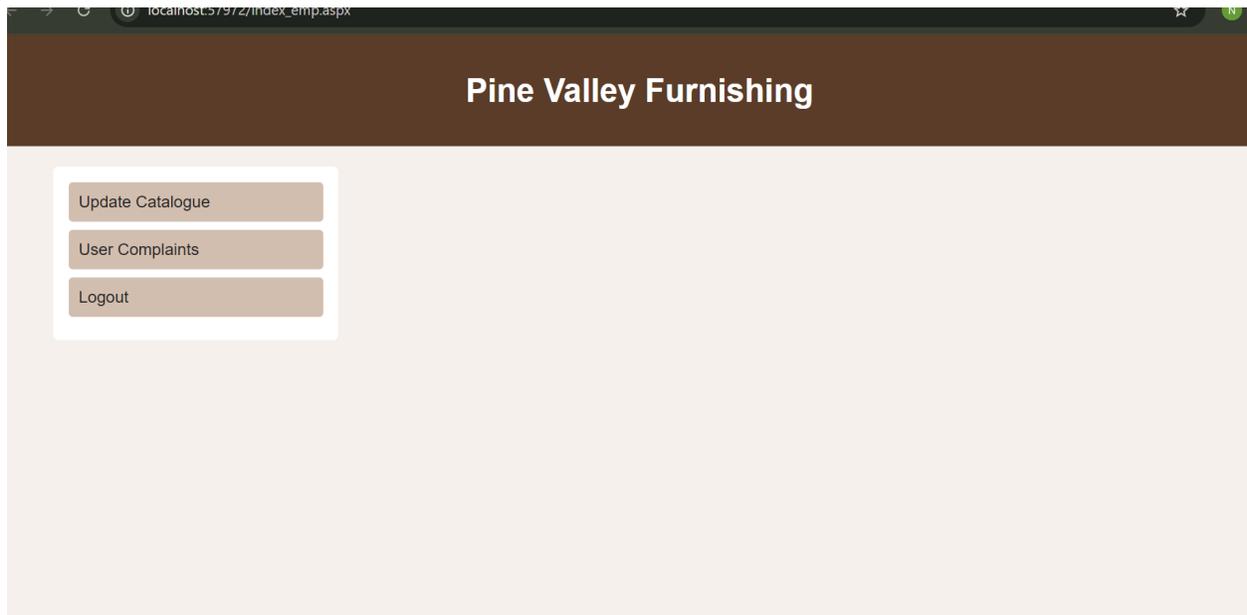
<div class="container">
<div class="menu">
<asp:LinkButton ID="lnkUpdate" runat="server"PostBackUrl="update.aspx">Update
Catalogue</asp:LinkButton>
<asp:LinkButton ID="lnkHelp" runat="server"PostBackUrl="help.aspx">User
Complaints</asp:LinkButton>
<asp:LinkButton ID="lnkLogout" runat="server"
PostBackUrl="index.aspx">Logout</asp:LinkButton>
</div>
</div>
```

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

## index\_emp.aspx.vb

Partial Class index\_emp  
Inherits System.Web.UI.Page

End Class



## Login\_as.aspx

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="login_as.aspx.vb"
Inherits="login_as" %>
<!DOCTYPE html>
<html>
<head runat="server">
<title>Login Option</title>
<link href="style.css" rel="stylesheet" />
</head>
<body>
<form runat="server">

<header>
<h1>Pine Valley Furnishing</h1>
</header>
```

```
<div class="form-box">
<h2>Login Options</h2>

<asp:LinkButton ID="lnkEmp" runat="server" OnClick="lnkEmp_Click">Login As
Employee</asp:LinkButton>
<asp:LinkButton ID="lnkCust" runat="server" OnClick="lnkCust_Click">Login As
Customer</asp:LinkButton>

<asp:Button ID="btnBack" runat="server" Text="Back" OnClick="btnBack_Click" />

</div>

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

## [login\\_as.aspx.vb](#)

Partial Class login\_as

Inherits System.Web.UI.Page

```
Protected Sub lnkEmp_Click(sender As Object, e As EventArgs)
    Response.Redirect("login_emp.aspx")
End Sub
```

```
Protected Sub lnkCust_Click(sender As Object, e As EventArgs)
    Response.Redirect("login_cust.aspx")
End Sub
```

```
Protected Sub btnBack_Click(sender As Object, e As EventArgs)
    Response.Redirect("index.aspx")
End Sub
```

End Class

# Pine Valley Furnishing

## Login Options

Login As Employee

Login As Customer

Back

## Cust\_index.aspx

Partial Class login\_as

Inherits System.Web.UI.Page

Protected Sub InkEmp\_Click(sender As Object, e As EventArgs)

    Response.Redirect("login\_emp.aspx")

End Sub

Protected Sub InkCust\_Click(sender As Object, e As EventArgs)

    Response.Redirect("login\_cust.aspx")

End Sub

Protected Sub btnBack\_Click(sender As Object, e As EventArgs)

    Response.Redirect("index.aspx")

End Sub

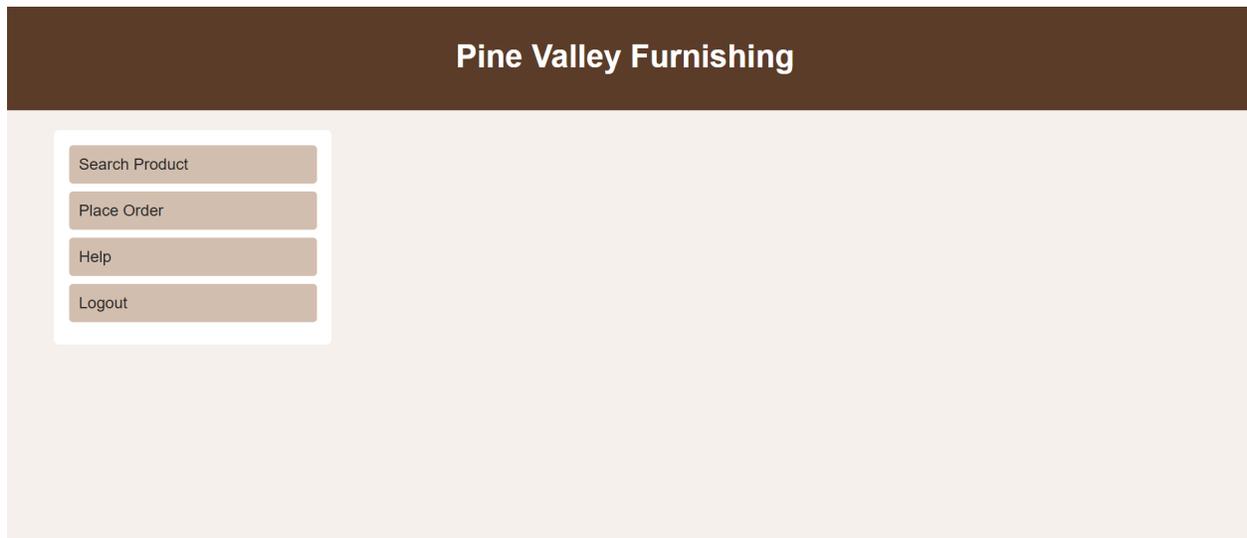
End Class

## [cust\\_index.aspx.vb](#)

Partial Class index\_cust

Inherits System.Web.UI.Page

End Class



## Login\_cust.aspx

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="login_cust.aspx.vb"
Inherits="login_cust" %>
<!DOCTYPE html>
<html>
<head runat="server">
<title>Customer Login</title>
<link href="style.css" rel="stylesheet" />
</head>
<body>
<form runat="server">

<header>
<h1>Pine Valley Furnishing</h1>
</header>

<div class="form-box">
<h2>Customer Login</h2>

<asp:TextBox ID="txtCustID" runat="server" Text="CUST001"
ReadOnly="True"></asp:TextBox>
<asp:TextBox ID="txtPassword" runat="server" TextMode="Password" Text="22345"
ReadOnly="True"></asp:TextBox>

<asp:Button ID="btnLogin" runat="server" PostBackUrl="index_cust.aspx" Text="Login" />
<asp:Button ID="btnBack" runat="server" PostBackUrl="login_as.aspx" Text="Back" />
```

```
<p>Don't have an account?
<asp:HyperLink ID="HyperLink1" runat="server" NavigateUrl="register.aspx"
CssClass="text-link">Register</asp:HyperLink>
</p>

</div>

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

## login\_cust.aspx.vb

```
Partial Class login_cust
    Inherits System.Web.UI.Page
```

```
End Class
```

**Pine Valley Furnishing**

**Customer Login**

CUST001

Login

Back

Don't have an account? [Register](#)

## Login\_emp.aspx

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="login_emp.aspx.vb"
Inherits="login_emp" %>
<!DOCTYPE html>
```

```
<html>
<head runat="server">
<title>Employee Login</title>
<link href="style.css" rel="stylesheet" />
</head>
<body>
<form runat="server">

<header>
<h1>Pine Valley Furnishing</h1>
</header>

<div class="form-box">
<h2>Employee Login</h2>

<asp:TextBox ID="txtEmpID" runat="server" Text="EMP001" ReadOnly="True"></asp:TextBox>
<asp:TextBox ID="txtPassword" runat="server" TextMode="Password" Text="12345"
ReadOnly="True"></asp:TextBox>

<asp:Button ID="btnLogin" runat="server" Text="Login" PostBackUrl="index_emp.aspx" />
<asp:Button ID="btnBack" runat="server" Text="Back" PostBackUrl="login_as.aspx" />

</div>

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

## login\_emp.[aspx.vb](#)

```
Partial Class login_emp
    Inherits System.Web.UI.Page
```

```
End Class
```

# Pine Valley Furnishing

## Employee Login

## Order.aspx

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="order.aspx.vb"
Inherits="order" %>
<!DOCTYPE html>
<html>
<head runat="server">
<title>Place Order</title>
<link href="style.css" rel="stylesheet" />
</head>
<body>
<form runat="server">

<header>
<h1>Chairs</h1>
</header>

<div class="container">
<div class="products">

<div class="product-card">

<p>$5000</p>
<asp:Button ID="btnAdd1" runat="server" Text="Add to Cart" />
```

```
</div>
```

```
<div class="product-card">  
  
<p>$7000</p>  
<asp:Button ID="btnAdd2" runat="server" Text="Add to Cart" />  
</div>
```

```
<div class="product-card">  
  
<p>$9000</p>  
<asp:Button ID="btnAdd3" runat="server" Text="Add to Cart" />  
</div>
```

```
</div>
```

```
<br />
```

```
<asp:Button ID="btnBack" runat="server" Text="Back" PostBackUrl="index.aspx" />  
<asp:Button ID="btnCart" runat="server" Text="Cart" PostBackUrl="cart.aspx" />
```

```
</div>
```

```
</form>
```

```
</body>
```

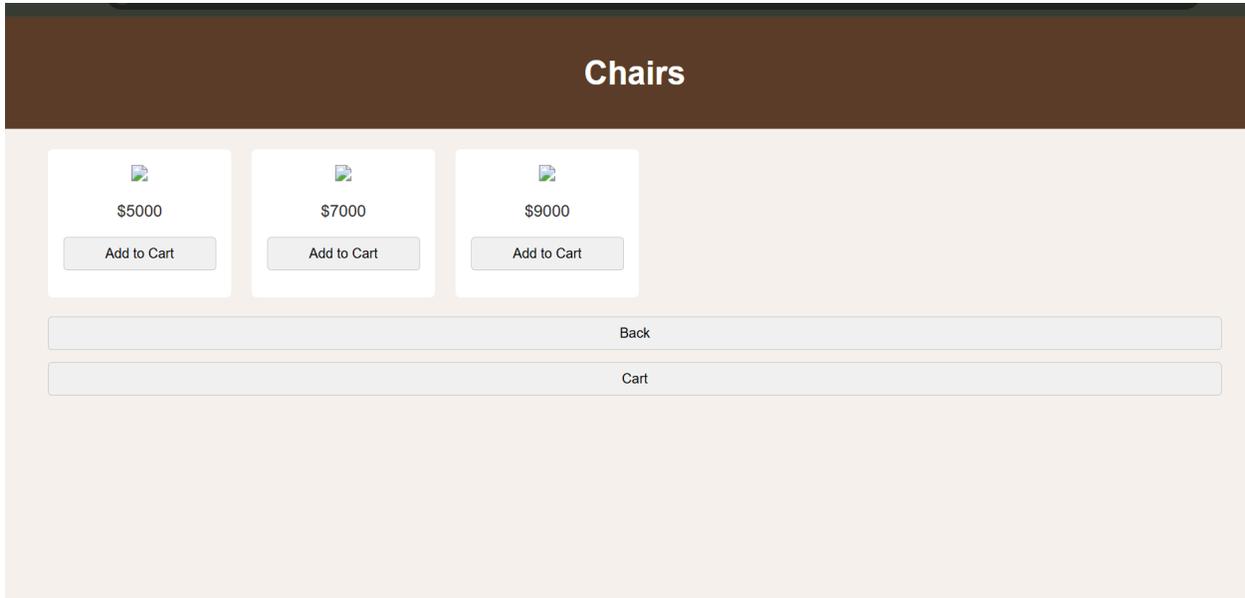
```
</html>
```

## [order.aspx.vb](#)

Partial Class order

Inherits System.Web.UI.Page

End Class



## Payment.aspx

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="payment.aspx.vb"
Inherits="payment" %>
<!DOCTYPE html>
<html>
<head runat="server">
<title>Payment</title>
<link href="style.css" rel="stylesheet" />
</head>
<body>
<form runat="server">

<header>
<h1>Pine Valley Furnishing</h1>
</header>

<div class="form-box">
<h2>Order Checkout</h2>

<asp:RadioButton ID="r1" runat="server" GroupName="payment" Text="Cash on Delivery" />
<asp:RadioButton ID="r2" runat="server" GroupName="payment" Text="Card / Credit" />

<h3>Billing Address</h3>

<asp:RadioButton ID="r3" runat="server" GroupName="address" Text="Same as Shipping" />
<asp:RadioButton ID="r4" runat="server" GroupName="address" Text="Other" />
```

```
<br /><br />
```

```
<asp:Button ID="btnConfirm" runat="server" Text="Confirm Order" />  
<asp:Button ID="btnBack" runat="server" Text="Back" PostBackUrl="cart.aspx" />
```

```
</div>
```

```
</form>
```

```
</body>
```

```
</html>
```

[payment.aspx.vb](#)

Partial Class payment  
Inherits System.Web.UI.Page

End Class

payment.aspx

**Pine Valley Furnishing**

**Order Checkout**

Cash on Delivery

Card / Credit

**Billing Address**

Same as Shipping

Other

Confirm Order

Back

## Register.aspx

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="register.aspx.vb"
Inherits="register" %>
<!DOCTYPE html>
<html>
<head runat="server">
<title>Customer Registration</title>
<link href="style.css" rel="stylesheet" />
</head>
<body>
<form runat="server">

<header>
<h1>Pine Valley Furnishing</h1>
</header>

<div class="form-box">
<h2>Customer Registration</h2>

<asp:TextBox ID="txtName" runat="server" placeholder="Enter Name"></asp:TextBox>
<asp:TextBox ID="txtEmail" runat="server" placeholder="Enter Email"></asp:TextBox>
<asp:TextBox ID="txtPassword" runat="server" TextMode="Password" placeholder="Enter
Password"></asp:TextBox>
<asp:TextBox ID="txtConfirm" runat="server" TextMode="Password" placeholder="Confirm
Password"></asp:TextBox>
<asp:TextBox ID="txtAddress" runat="server" placeholder="Enter Address"></asp:TextBox>

<asp:Button ID="btnRegister" runat="server" Text="Register" />
<asp:Button ID="btnBack" runat="server" Text="Back" PostBackUrl="login_as.aspx" />

</div>

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

### [register.aspx.vb](#)

```
Partial Class register
    Inherits System.Web.UI.Page
End Class
```

# Pine Valley Furnishing

## Customer Registration

## Update.aspx

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="update.aspx.vb"
Inherits="update" %>
<!DOCTYPE html>
<html>
<head runat="server">
<title>Update Product Catalog</title>
<link href="style.css" rel="stylesheet" />
</head>
<body>
<form runat="server">

<header>
<h1>Update Product Catalog</h1>
</header>

<div class="form-box">

<asp:Label runat="server" Text="Product ID"></asp:Label>
<asp:TextBox ID="txtID" runat="server"></asp:TextBox>

<asp:Label runat="server" Text="Product Name"></asp:Label>
<asp:TextBox ID="txtName" runat="server"></asp:TextBox>
```

```
<asp:Label runat="server" Text="Price"></asp:Label>
<asp:TextBox ID="txtPrice" runat="server"></asp:TextBox>

<asp:Button ID="btnUpdate" runat="server" Text="Update" />
<asp:Button ID="btnBack" runat="server" Text="Back" PostBackUrl="index_emp.aspx" />

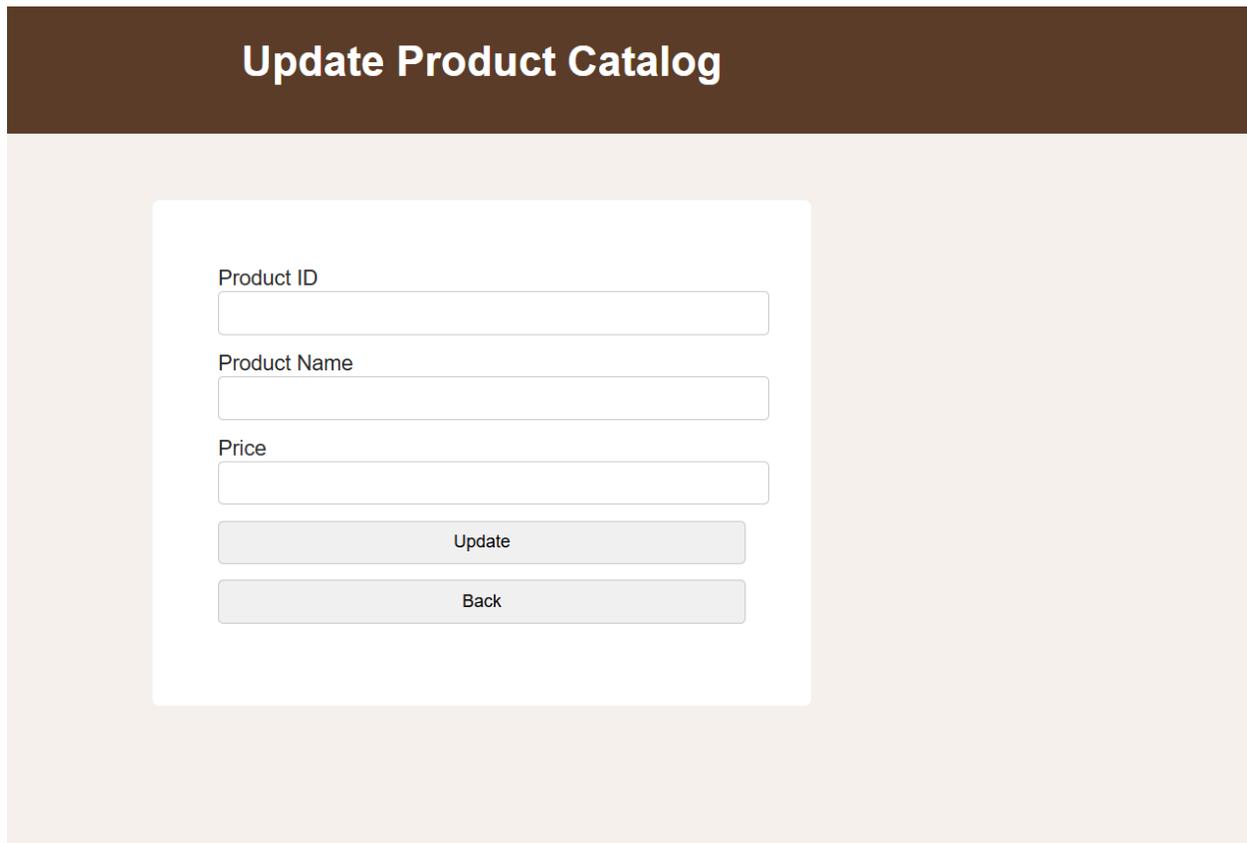
</div>

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

[update.aspx.vb](#)

Partial Class update  
Inherits System.Web.UI.Page

End Class



**Update Product Catalog**

Product ID

Product Name

Price

Update

Back

## Style sheet code:

```
body {  
  font-family: Arial, sans-serif;  
  margin: 0;  
  background-color: #f5f3ef;  
  color: #2c2c2c;  
}
```

```
header {  
  background: #5a3e2b;  
  color: white;  
  padding: 15px;  
  text-align: center;  
}
```

```
.container {  
  width: 90%;  
  margin: auto;  
  padding: 20px;  
}
```

```
.menu {  
  width: 250px;  
  background: white;  
  padding: 15px;  
  border-radius: 5px;  
}
```

```
.menu a {  
  display: block;  
  padding: 10px;  
  margin-bottom: 8px;  
  background: #d6c2b0;  
  text-decoration: none;  
  color: #2c2c2c;  
  border-radius: 4px;  
}
```

```
.menu a:hover {  
  background: #8b5e3c;  
  color: white;  
}
```

```
.form-box {  
  background: white;  
  padding: 50px;  
  width: 400px;  
  margin: 50px auto;  
  border-radius: 5px;  
}
```

```
.form-box a {  
  display: block;  
  padding: 10px;  
  margin-bottom: 8px;  
  background: #d6c2b0;  
  text-decoration: none;  
  color: #2c2c2c;  
  border-radius: 4px;  
}
```

```
.form-box a:hover {  
  background: #8b5e3c;  
  color: white;  
}
```

```
.form-box p {  
  margin-top: 15px;  
  font-size: 14px;  
  text-align: center;  
}
```

```
.form-box a.text-link {  
  display: inline-block;  
  padding: 0;  
  margin: 0;  
  background: none;  
  color: #2e86ab;  
  border-radius: 0;  
}
```

```
.form-box a.text-link:hover {  
  background: none;  
  color: #2e86ab;  
  text-decoration: underline;  
}
```

```
.form-box label {  
  display: block;  
  margin-bottom: 10px;  
}
```

```
.form-box input[type="checkbox"] {  
  width: auto;  
  margin-right: 8px;  
}
```

```
input, select {  
  width: 100%;  
  padding: 8px;  
  margin-bottom: 12px;  
  border: 1px solid #ccc;  
  border-radius: 4px;  
}
```

```
button {  
  padding: 8px 15px;  
  background: #d6c2b0;  
  color: white;  
  border: none;  
  text-decoration: none;  
  color: #2c2c2c;  
  border-radius: 4px;  
  cursor: pointer;  
}
```

```
button:hover {  
  background: #8b5e3c;  
}
```

```
.products {  
  display: flex;  
  gap: 20px;  
}
```

```
.product-card {  
  background: white;  
  padding: 15px;  
  width: 150px;  
  text-align: center;  
  border-radius: 5px;
```

```
}

.group {
  margin-bottom: 15px;
}

.group label {
  display: block;
  margin-bottom: 8px;
}

.group input[type="radio"] {
  width: auto;
  margin-right: 8px;
}

.btn-group {
  margin-top: 15px;
}

.btn-group button {
  margin-right: 10px;
}

.panel {
  background: none;
  border-radius: 5px;
  max-width: 800px;
}

.panel input {
  width: 70%;
  display: inline-block;
}

.panel button {
  display: inline-block;
  margin-left: 10px;
}

.list {
  list-style: none;
  padding: 0;
}
```

```
.list li {
    background: #d6c2b0;
    margin-bottom: 8px;
    padding: 8px;
    border-radius: 4px;
}
```

## Question no 4

### Search.aspx

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="search.aspx.vb"
Inherits="search" %>
<!DOCTYPE html>
<html>
<head runat="server">
    <title>Search Products</title>
    <link href="style.css" rel="stylesheet" />
</head>
<body>
<form runat="server">
<header>
    <h1>Search Products</h1>
</header>

<div class="container">
    <div class="panel">

        <asp:TextBox ID="txtSearch" runat="server" placeholder="Search..."></asp:TextBox>
        <asp:Button ID="btnSearch" runat="server" Text="Search" OnClick="btnSearch_Click" />

        <h3>Furniture Category</h3>
        <ul class="list">
            <li>Chairs</li>
            <li>Desk</li>
            <li>Cupboards</li>
        </ul>

        <asp:Button ID="btnBack" runat="server" Text="Back" PostBackUrl="index.aspx" />

    </div>
</div>
```

```

<!-- GridView to show search results -->
<asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="False"
EmptyDataText="No products found">
  <Columns>
    <asp:BoundField DataField="Product_Id" HeaderText="Product ID" />
    <asp:BoundField DataField="Product_Description" HeaderText="Description" />
    <asp:BoundField DataField="Product_Finish" HeaderText="Finish" />
    <asp:BoundField DataField="Standard_Price" HeaderText="Price"
DataFormatString="{0:C}" />
  </Columns>
</asp:GridView>

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

```

## [search.aspx.vb](#)

```

Imports System.Data
Imports System.Data.SqlClient
Imports System.Configuration

```

```

Partial Class search
  Inherits System.Web.UI.Page

```

```

Protected Sub btnSearch_Click(sender As Object, e As EventArgs) Handles btnSearch.Click
  ' Get search text
  Dim keyword As String = txtSearch.Text.Trim()

  ' Check if user entered something
  If keyword = "" Then
    GridView1.DataSource = Nothing
    GridView1.DataBind()
    Return
  End If

  ' SQL query to search products by description using LIKE operator
  Dim sql As String = "SELECT Product_Id, Product_Description, Product_Finish,
Standard_Price " &
    "FROM PRODUCT_t " &
    "WHERE Product_Description LIKE @keyword"

```

```
' Get connection string from web.config
Dim conStr As String =
ConfigurationManager.ConnectionStrings("PVFCCConnection").ConnectionString

' Connect to database and execute query
Using con As New SqlConnection(conStr)
    Using cmd As New SqlCommand(sql, con)
        cmd.Parameters.AddWithValue("@keyword", "%" & keyword & "%") ' LIKE operator
        con.Open()
        Dim reader As SqlDataReader = cmd.ExecuteReader()
        GridView1.DataSource = reader
        GridView1.DataBind()
    End Using
End Using
End Sub
End Class
```

## Question no 5:

Testing of Question no 4 code:

The screenshot shows a web application interface with a dark brown header containing the text "Search Products". Below the header, there is a search input field with the placeholder text "Search...". To the right of the input field is a "Search" button. Below the search input field, there is a section titled "Furniture Category" with three buttons labeled "Chairs", "Desk", and "Cupboards". Below these buttons is a "Back" button. The interface is styled with a light beige background and a dark brown header.

## Search Products

### Furniture Category

Product ID	Description	Finish	Price
2	Coffee Table	Natural Ash	\$200.00
3	Computer Desk	Natural Ash	\$375.00
4	Entertainment Center	Natural Maple	\$650.00
8	Computer Desk	Walnut	\$250.00