

Internet Application Development

Lab – 10



Submitted to

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DCIS, PIEAS

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Default.aspx:

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

```
<!DOCTYPE html>
```

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

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

```
<title>Login</title>
```

```
<link rel="stylesheet" type="text/css" href="StyleSheet.css" />
```

```
<style>
```

```
body {
    font-family: 'Arial', sans-serif;
    background-color: #f4f4f4;
    display: flex;
    justify-content: center;
    align-items: center;
    height: 100vh;
    margin: 0;
    background-image: url('ScreenShots/login-image.jpg');
}
```

```
.container {
    display: flex;
    flex-direction: column;
    justify-content: center;
    align-items: center;
    height: 400px;
    margin: 0;
    padding: 20px;
    border-radius: 5px;
    box-shadow: 0 2px 5px rgba(0, 0, 0, 0.2);
    max-width: 400px;
    background-color: rgba(0,0,0,0.5);
}
```

```
form {
    margin-bottom: 20px;
    width:100%;
}
```

```
form label {
    display: block;
    margin-bottom: 5px;
    color:white;
    font-weight:bold;
}
```

```
form input[type="text"],
form input[type="password"] {
    width: 100%;
    padding: 10px;
    margin-bottom: 10px;
    border: 1px solid #ddd;
    border-radius: 3px;
    box-sizing: border-box;
```

```

        background-color: #333;
        color: #fff;
    }

    form input[type="text"]:focus,
    form input[type="password"]:focus {
        border-color: #6b7db3;
        outline: none;
    }

    form input[type="text"]::placeholder,
    form input[type="password"]::placeholder {
        color: #999;
    }

    #button {
        position: relative;
        left: 32%;
        width: 30%;
        padding: 10px;
        background-image: linear-gradient(45deg, #a8bfff 0%, #884dff 100%);
        color: white;
        border: none;
        border-radius: 3px;
        top: 10px;
        cursor: pointer;
        transition: background-color 0.3s ease;
    }

    #button:hover {
        background-image: linear-gradient(45deg, #6b7db3 0%, #5031b2 100%);
    }

    #lblMessage {
        color: red;
        text-align: center;
        position: relative;
        top: 50px;
        left: -35px;
    }
}
</style>
</head>
<body>
    <div class="container">
        <h1 style="text-align:center; color:#adb5bd;">Login as Teacher or Student</h1>
        <form id="form1" runat="server">
            <asp:Label runat="server"
AssociatedControlID="usernameTextBox">Username:</asp:Label>
            <asp:TextBox runat="server" ID="usernameTextBox" placeholder="admin for
teacher and student1/2/3 for students"></asp:TextBox>
            <br />
            <asp:Label runat="server"
AssociatedControlID="passwordTextBox">Password:</asp:Label>
            <asp:TextBox runat="server" ID="passwordTextBox" TextMode="Password"
placeholder="admin123 for teacher and student123/456/789 for students"></asp:TextBox>
            <br />
            <asp:Button ID="button" runat="server" Text="Login"
OnClick="loginButton_Click" />
        </form>
    </div>
</body>
</html>

```

```

        <asp:Label ID="lblMessage" runat="server" />
    </form>
</div>
</body>
</html>

```

Default.aspx.vb:

```

Imports System.Data.SqlClient
Partial Class _Default
    Inherits System.Web.UI.Page

    Private WithEvents loginButton As Button
    Dim connectionString As String = "workstation id=pvfcCompany-
db.mssql.somee.com;packet size=4096;user id=mhamza-001_SQLLogin_8;pwd=a5iq4kxcyg;data
source=pvfcCompany-db.mssql.somee.com;persist security info=False;initial
catalog=pvfcCompany-db;TrustServerCertificate=True"

    Protected Sub loginButton_Click(sender As Object, e As EventArgs) Handles
loginButton.Click
        Dim username As String = usernameTextBox.Text
        Dim password As String = passwordTextBox.Text
        Dim query As String = "SELECT USER_TYPE, USER_PASSWORD FROM USERS_t WHERE
USER_NAME = @Username;"

        Using connection As New SqlConnection(connectionString)
            Try
                connection.Open()
                Using command As New SqlCommand(query, connection)
                    command.Parameters.AddWithValue("@Username", username)

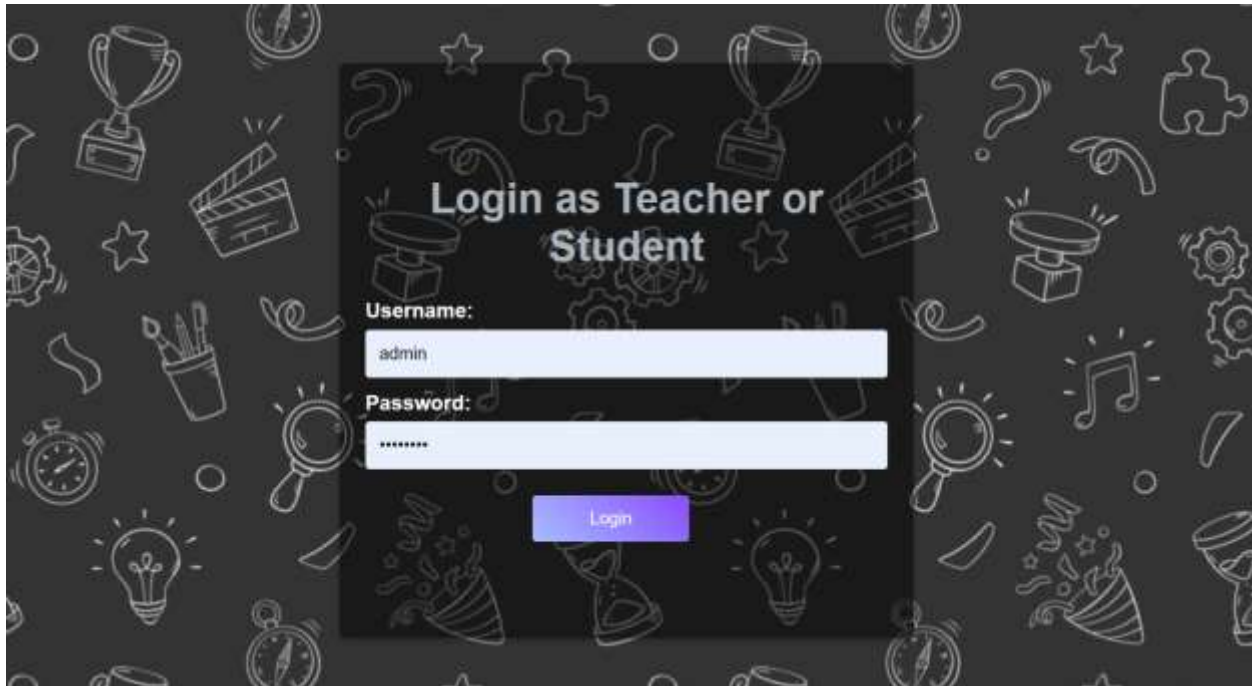
                    Using reader As SqlDataReader = command.ExecuteReader()
                        If reader.HasRows Then
                            While reader.Read()
                                Dim userType As String = reader("USER_TYPE").ToString()
                                Dim dbPassword As String =
reader("USER_PASSWORD").ToString()

                                If password = dbPassword Then
                                    If userType = "admin" Then
                                        Response.Redirect("Adminquestion.aspx")
                                    ElseIf userType = "student" Then
                                        Response.Redirect("Studentform.aspx")
                                    End If
                                Exit While
                            End If
                        End While
                    Else
                        lblMessage.Text = "Invalid username or password."
                    End If
                End Using
            End Using
        Catch ex As Exception
            lblMessage.Text = "An error occurred while checking credentials."
        End Try
    End Using

```

End Sub
End Class

Output:



Adminquestion.aspx:

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

```
<!DOCTYPE html>  
<html xmlns="http://www.w3.org/1999/xhtml">  
<head runat="server">  
  <title>No_of_questions</title>  
  <style>  
    body {  
      font-family: Arial, sans-serif;  
      background-image: url(ScreenShots/login-image.jpg);  
      margin: 0;  
      padding: 0;  
      display: flex;  
      justify-content: center;  
      align-items: center;  
      height: 100vh;  
    }  
  
    form {  
      background-color: rgba(0,0,0,0.5);  
      padding: 20px;  
      max-height: 150px;
```

```

        border-radius: 8px;
        box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);
        width: 300px;
        text-align: center;
    }

    label {
        display: block;
        margin-bottom: 10px;
        color: white;
        font-weight: bold;
    }

    input[type="text"] {
        width: calc(100% - 20px);
        padding: 10px;
        margin-bottom: 20px;
        border: 1px solid #ddd;
        border-radius: 3px;
        box-sizing: border-box;
        background-color: #333;
        color: #fff;
    }

    input[type="text"]:focus {
        border-color: #6b7db3;
        outline: none;
    }

    input[type="text"]::placeholder {
        color: #999;
    }

    #submitButton {
        width: 30%;
        padding: 10px;
        border: none;
        background-image: linear-gradient(45deg, #a8bfff 0%, #884dff 100%);
        color: #fff;
        border-radius: 4px;
        cursor: pointer;
        transition: background-color 0.3s ease;
    }

    #submitButton:hover {
        background-image: linear-gradient(45deg, #6b7db3 0%, #5031b2 100%);
    }

    #lblMessage {
        display: block;
        margin: 20px auto;
    }
</style>
</head>
<body>
    <form id="form1" runat="server">
        <div class="container">
            <label for="questions">Number of Questions:</label>

```

```

        <asp:TextBox runat="server" ID="questions" placeholder="Enter
number"></asp:TextBox>
        <br />
        <asp:Button ID="submitButton" runat="server" Text="Submit"
OnClick="submitButton_Click" />
        <asp:Label ID="lblMessage" runat="server" Text=""></asp:Label>
    </div>
</form>
</body>
</html>

```

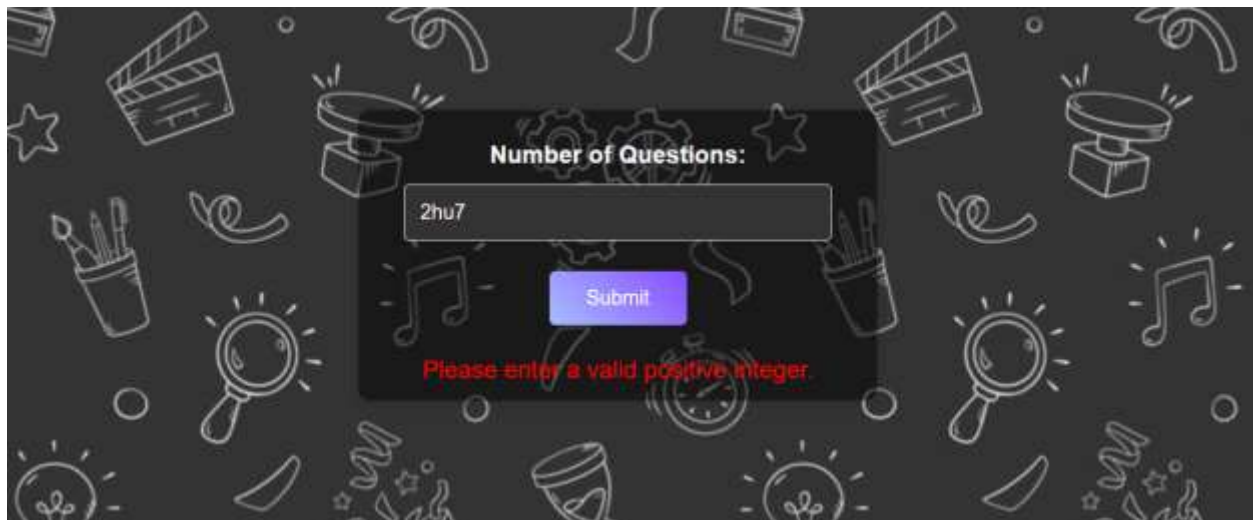
Adminquestion.aspx.vb:

```

Partial Class Adminquestion
    Inherits System.Web.UI.Page
    Protected Sub submitButton_Click(sender As Object, e As EventArgs) Handles
submitButton.Click
        Dim numberOfQuestions As Integer
        If Integer.TryParse(questions.Text, numberOfQuestions) AndAlso numberOfQuestions
> 0 Then
            Dim url As String = "Default3.aspx?numberOfQuestions=" &
numberOfQuestions.ToString()
            Response.Redirect(url)
        Else
            lblMessage.Text = "Please enter a valid positive integer."
            lblMessage.ForeColor = System.Drawing.Color.Red
        End If
    End Sub
End Class

```

Output:



Default3.aspx:

```
<%@ Page Language="VB" AutoEventWireup="false" CodeFile="Default3.aspx.vb"
Inherits="Default3" %>
```

```
<!DOCTYPE html>
```

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

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

```
<title>Enter Question Details</title>
```

```
<link rel="stylesheet" type="text/css" href="Default3.css" />
```

```
<style>
```

```
body, html {
    height: 100%;
    margin: 0;
    padding: 0;
    font-family: 'Arial', sans-serif;
    background-color: white;
}
```

```
form {
    height: auto;
    padding: 20px;
}
```

```
h1 {
    color: #5D5C61;
    text-align: center;
    margin-left: 20px;
    font-size: 24px;
}
```

```
table {
    width: 100%;
    border-collapse: collapse;
    table-layout: fixed;
}
```

```
table, th, td {
    border: 1px solid #ddd;
}
```

```
th, td {
    padding: 15px;
    text-align: left;
}
```

```
th {
    background-color: #007bff;
    color: white;
}
```

```
tr:nth-child(even) {
    background-color: #f2f2f2;
}
```

```
input[type="text"] {
```



```

        max-width: calc(100% - 10px);
    }

    input[type="text"]:focus {
        border-color: #a8bfff;
        outline: none;
    }

    #submitButton {
        width: auto;
        padding: 10px 20px;
        background-image: linear-gradient(45deg, #a8bfff 0%, #884dff 100%);
        color: white;
        border: none;
        border-radius: 3px;
        cursor: pointer;
        transition: background-color 0.3s ease;
        display: block;
        margin: 20px 0;
    }

    #submitButton:hover {
        background-image: linear-gradient(45deg, #6b7db3 0%, #5031b2 100%);
    }
</style>
</head>
<body>
    <form id="form1" runat="server">
        <h1>Enter Question Details</h1>
        <asp:Table ID="tbl" runat="server" />
        <asp:Button runat="server" ID="submitButton" Text="Submit"
OnClick="submitButton_Click" />
    </form>
</body>
</html>

```

Default3.aspx.vb:

```

Imports System.Data.SqlClient
Partial Class Default3
    Inherits System.Web.UI.Page
    Dim connectionString As String = "workstation id=pvfcCompany-
db.mssql.somee.com;packet size=4096;user id=mhamza-001_SQLLogin_8;pwd=a5iq4kxcyg;data
source=pvfcCompany-db.mssql.somee.com;persist security info=False;initial
catalog=pvfcCompany-db;TrustServerCertificate=True"
    Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load
        If IsPostBack Then
            Dim numberOfQuestions As Integer
            Integer.TryParse(Request.QueryString("numberOfQuestions"), numberOfQuestions)
            savedata3(numberOfQuestions)
            Response.Redirect("Default.aspx")
        End If
        Dim i, j As Integer
        If Not IsPostBack Then
            Dim numberOfQuestions As Integer = 0
            If Integer.TryParse(Request.QueryString("numberOfQuestions"),
numberOfQuestions) AndAlso numberOfQuestions > 0 Then

```

```

        For i = 0 To Val(numberOfQuestions - 1)
            Dim rowNew As New TableRow()
            Dim lblquestion As New Label()
            lblquestion.Text = "Question # " & (i + 1)
            tbl.Controls.Add(rowNew)
            Dim cell_i As New TableCell()
            cell_i.Controls.Add(lblquestion)
            rowNew.Controls.Add(cell_i)
            For j = 0 To 5
                Dim cell As New TableCell()
                Dim lblNew As New Label()
                If j = 5 Then
                    lblNew.Text = "Answer"
                ElseIf j = 0 Then
                    lblNew.Text = "Question"
                Else
                    lblNew.Text = "Option " & Convert.ToChar(Asc("a") + j - 1)
                End If
                Dim questionInput As New HtmlInputText()
                questionInput.ID = "question_" & i & "_" & j
                If i = 0 Then
                    If j = 0 Then
                        questionInput.Attributes("placeholder") = "Default
ASP.NET file?"
                    ElseIf j = 5 Then
                        questionInput.Attributes("placeholder") = "option_c"
                    ElseIf j = 1 Then
                        questionInput.Attributes("placeholder") = ".html"
                    ElseIf j = 2 Then
                        questionInput.Attributes("placeholder") = ".css"
                    ElseIf j = 3 Then
                        questionInput.Attributes("placeholder") = ".aspx"
                    ElseIf j = 4 Then
                        questionInput.Attributes("placeholder") = ".js"
                    End If
                End If
                cell.Controls.Add(lblNew)
                cell.Controls.Add(questionInput)
                rowNew.Controls.Add(cell)
            Next
        Next
    Else
        Alert("Invalid or missing numberOfQuestions parameter in the query
string.")
    End If
End If
End Sub
Private Sub Alert(message As String)
    ClientScript.RegisterStartupScript(Me.GetType(), "alert", "alert('" & message &
    ');", True)
End Sub
Protected Sub submitButton_Click(sender As Object, e As EventArgs) Handles
submitButton.Click

End Sub
Private Sub savedata3(numberOfQuestions As Integer)
    For i As Integer = 0 To Val(numberOfQuestions - 1)
        Dim question As String = Request.Form("question_" & i & "_0")

```

```

Dim optionA As String = Request.Form("question_" & i & "_1")
Dim optionB As String = Request.Form("question_" & i & "_2")
Dim optionC As String = Request.Form("question_" & i & "_3")
Dim optionD As String = Request.Form("question_" & i & "_4")
Dim answer As String = Request.Form("question_" & i & "_5")
Using connection As New SqlConnection(connectionString)
    Try
        connection.Open()
        Dim sql As String = "INSERT INTO QUESTION_NEW_t (question_text,
option_a, option_b, option_c, option_d, question_answer) VALUES (@question_text,
@option_a, @option_b, @option_c, @option_d, @question_answer)"
        Dim command As New SqlCommand(sql, connection)
        command.Parameters.AddWithValue("@question_text", question)
        command.Parameters.AddWithValue("@option_a", optionA)
        command.Parameters.AddWithValue("@option_b", optionB)
        command.Parameters.AddWithValue("@option_c", optionC)
        command.Parameters.AddWithValue("@option_d", optionD)
        command.Parameters.AddWithValue("@question_answer", answer)
        command.ExecuteNonQuery()
    Catch ex As Exception
        Alert("An error occurred while saving data: " & ex.Message)
    End Try
End Using
Next
End Sub
End Class

```

Output:

Enter Question Details

Question # 1	Question Default ASP.NET file?	Option a html	Option b css	Option c aspx	Option d js	Answer option_c
Question # 2	Question	Option a	Option b	Option c	Option d	Answer
Question # 3	Question	Option a	Option b	Option c	Option d	Answer
Question # 4	Question	Option a	Option b	Option c	Option d	Answer

Studentform.aspx:

```

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title>Quiz</title>

```

```
<link rel="stylesheet" type="text/css" href="Studentform.css" />
<style>
  body, html {
    margin: 0;
    padding: 0;
    font-family: 'Arial', sans-serif;
    background-color: #f9f9f9;
  }

  form {
    padding: 20px;
  }

  h1 {
    color: #333;
    text-align: center;
    margin-bottom: 20px;
  }

  #GridView1 {
    width: 100%;
    border-collapse: collapse;
    margin-bottom: 20px;
  }

  #GridView1 th {
    background-color: rgba(80, 49, 178, 0.7);
    color: white;
    padding: 15px;
    text-align: left;
  }

  #GridView1 td {
    padding: 15px;
    text-align: left;
    border-bottom: 1px solid #ddd;
  }

  .question-text {
    font-weight: bold;
  }

  #GridView1 tr:nth-child(even) {
    background-color: #f2f2f2;
  }

  #SubmitButton {
    width: auto;
    padding: 10px 20px;
    background-image: linear-gradient(45deg, #a8bfff 0%, #884dff 100%);
    color: white;
    border: none;
    border-radius: 4px;
    cursor: pointer;
    transition: background-color 0.3s ease;
    display: block;
    margin: 0 auto;
  }
}
```

```

        #SubmitButton:hover {
            background-image: linear-gradient(45deg, #6b7db3 0%, #5031b2 100%);
        }

        .mark-label {
            font-weight: bold;
            color: #333;
            text-align: center;
            display: block;
        }

        .center-cell {
            text-align: center;
        }
    </style>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <asp:GridView ID="GridView1" runat="server" AutoGenerateColumns="false"
            OnRowDataBound="GridView1_RowDataBound">
                <Columns>
                    <asp:BoundField DataField="question_text" HeaderText="Question"
                    ItemStyle-CssClass="question-text" />

                    <asp:TemplateField HeaderText="Options">
                        <ItemTemplate>
                            <asp:RadioButtonList ID="OptionRadiolist" runat="server"
                            RepeatDirection="Horizontal"></asp:RadioButtonList>
                        </ItemTemplate>
                    </asp:TemplateField>
                    <asp:TemplateField HeaderText="Marks" ItemStyle-CssClass="center-
cell">
                        <ItemTemplate>
                            <span class="mark-label">1</span>
                        </ItemTemplate>
                    </asp:TemplateField>
                </Columns>
            </asp:GridView>
            <asp:Button ID="SubmitButton" runat="server" Text="Submit Quiz"
            OnClick="SubmitButton_Click" />
        </div>
    </form>
</body>
</html>

```

Studentform.aspx.vb:

```

Imports System.Data.SqlClient
Imports System.Data
Partial Class Studentform
    Inherits System.Web.UI.Page

    Dim connectionString As String = "workstation id=pvfcCompany-
db.mssql.somee.com;packet size=4096;user id=mhamza-001_SQLLogin_8;pwd=a5iq4kxcyg;data

```

```
source=pvfcCompany-db.mssql.somee.com;persist security info=False;initial
catalog=pvfcCompany-db;TrustServerCertificate=True"
```

```
Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load
    If Not IsPostBack Then
        LoadCustomerData()
    End If
End Sub
```

```
Private Sub LoadCustomerData()
    Using connection As New SqlConnection(connectionString)
        Try
            connection.Open()
            Dim query As String = "SELECT * FROM QUESTION_NEW_t;"
            Using command As New SqlCommand(query, connection)
                Dim adapter As New SqlDataAdapter(command)
                Dim dt As New DataTable()
                adapter.Fill(dt)
                GridView1.DataSource = dt
                GridView1.DataKeyNames = New String() {"question_text"} ' Set the
DataKeyNames
                GridView1.DataBind()
            End Using
        Catch ex As Exception
            ClientScript.RegisterStartupScript(Me.GetType(), "ErrorAlert",
"alert('Error in loading quiz');", True)
        End Try
        connection.Close()
    End Using
End Sub
```

```
Private Function LoadQuestionAnswers() As String()
    Dim questionAnswers As New List(Of String)()

    Using connection As New SqlConnection(connectionString)
        Try
            connection.Open()
            Dim query As String = "SELECT question_answer FROM QUESTION_NEW_t;"
            Using command As New SqlCommand(query, connection)
                Dim reader As SqlDataReader = command.ExecuteReader()
                While reader.Read()
                    Dim answer As String = reader.GetString(0).ToLower()
                    questionAnswers.Add(answer)
                End While
            End Using
        Catch ex As Exception
            ClientScript.RegisterStartupScript(Me.GetType(), "ErrorAlert",
"alert('Error retrieving data')", True)
        Finally
            connection.Close()
        End Try
    End Using
    Return questionAnswers.ToArray()
End Function
```

```
Protected Sub GridView1_RowDataBound(sender As Object, e As GridViewRowEventArgs)
Handles GridView1.RowDataBound
    If e.Row.RowType = DataControlRowType.DataRow Then
```

```

        Dim row As DataRowView = CType(e.Row.DataItem, DataRowView)
        Dim optionRadioList As RadioButtonList =
CType(e.Row.FindControl("OptionRadioList"), RadioButtonList)
        optionRadioList.Items.Clear()
        optionRadioList.Items.Add(New ListItem(row("option_a").ToString(),
"option_a"))
        optionRadioList.Items.Add(New ListItem(row("option_b").ToString(),
"option_b"))
        optionRadioList.Items.Add(New ListItem(row("option_c").ToString(),
"option_c"))
        optionRadioList.Items.Add(New ListItem(row("option_d").ToString(),
"option_d"))
        End If
    End Sub

    Protected Sub SubmitButton_Click(sender As Object, e As EventArgs)
        Dim totalQuestions As Integer = GridView1.Rows.Count
        Dim correctAnswers As Array = LoadQuestionAnswers()
        Dim score As Integer

        For i As Integer = 0 To totalQuestions - 1
            Dim row As GridViewRow = GridView1.Rows(i)
            Dim answerList As RadioButtonList =
DirectCast(row.FindControl("OptionRadioList"), RadioButtonList)
            Dim selectedAnswer As String = answerList.SelectedValue
            Dim questionCell As TableCell = row.Cells(0)
            Dim questionText As String = GridView1.DataKeys(i).Value.ToString()
            If selectedAnswer = correctAnswers(i) Then
                score += 1
            End If
        Next
        Dim url As String = "Resultquiz.aspx?score=" & score.ToString()
        Response.Redirect(url)
    End Sub
End Class

```

Output:

Question	Options	Marks
What does ASP.NET stand for?	<input type="radio"/> Active Server Pages Network <input type="radio"/> Advanced System Programming .NET <input type="radio"/> Application Service Provider Network <input type="radio"/> Active Server Pages .NET	1
What is the purpose of the ViewState in ASP.NET VB?	<input type="radio"/> To store session data <input type="radio"/> To maintain state across postbacks <input type="radio"/> To manage database connections <input type="radio"/> To handle user authentication	1
Which keyword is used to define a class in VB.NET?	<input type="radio"/> class <input type="radio"/> Class <input type="radio"/> Class() <input type="radio"/> Public	1
Which method is used to handle errors in ASP.NET VB?	<input type="radio"/> OnError <input type="radio"/> ErrorHandling <input type="radio"/> TryCatch <input type="radio"/> ExceptionHandling	1
Which of the following is used to maintain user state in ASP.NET?	<input type="radio"/> ViewState <input type="radio"/> QueryString <input type="radio"/> SessionState <input type="radio"/> ApplicationState	1

[Submit Quiz](#)

Resultquiz.aspx:

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

```
<!DOCTYPE html>
```

```
<html xmlns="http://www.w3.org/1999/xhtml">  
<head runat="server">  
  <title>Result</title>  
  <style>  
    body {  
      font-family: Arial, sans-serif;  
      margin: 0;  
      padding: 0;  
      background-color: #f4f4f4;  
      display: flex;  
      justify-content: center;  
      align-items: center;  
      min-height: 100vh;  
    }  
  
    #form1 {  
      max-width: 600px;  
      width: 100%;  
      margin: 20px auto;  
      padding: 30px;  
      background-color: #fff;  
      border-radius: 8px;  
      box-shadow: 0 2px 10px rgba(0, 0, 0, 0.1);  
      text-align: center;  
    }  
  
    #result {  
      font-size: 24px;  
      font-weight: bold;  
      color: #333;  
      margin-top: 20px;  
    }  
  
    @media (max-width: 480px) {  
      #form1 {  
        padding: 20px;  
      }  
  
      #result {  
        font-size: 20px;  
      }  
    }  
  </style>  
</head>  
<body>  
  <form id="form1" runat="server">  
    <div>  
      <asp:Label ID="result" runat="server" />  
    </div>  
  </form>
```

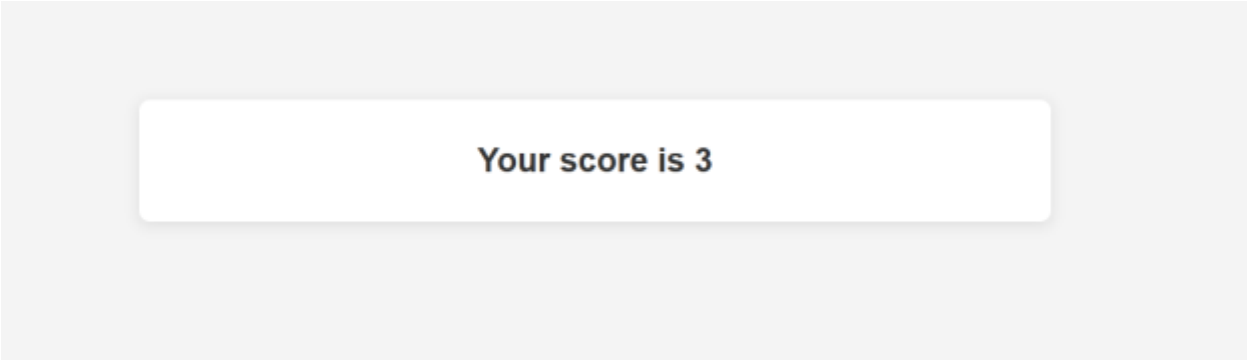


```
</body>  
</html>
```

Resultquiz.aspx.vb:

```
Partial Class Resultquiz  
    Inherits System.Web.UI.Page  
  
    Protected Sub Page_Load(sender As Object, e As EventArgs) Handles Me.Load  
        If Not IsPostBack Then  
            Dim score As Integer  
            Integer.TryParse(Request.QueryString("score"), score)  
            result.Text = "Your score is " & score  
        End If  
    End Sub  
  
End Class
```

Output:



Your score is 3