

Lab Assignment – 1

1. Create ASP.NET page to accept a name from the user and display welcome message.

Assignment1Q1.aspx Code

```
<%@ Page Language="C#" AutoEventWireup="true" CodeBehind="Assignment1.aspx.cs"
Inherits="Assignments.Assignment1" %>
```

```
<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Assignment 1</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/css/bootstrap.min.css"
rel="stylesheet">
  <script
src="https://cdn.jsdelivr.net/npm/@popperjs/core@2.9.3/dist/umd/popper.min.js"></script>
  <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.0.2/dist/js/bootstrap.min.js"></script>
</head>
<body>
  <form id="form1" runat="server">
    <nav class="navbar navbar-expand-lg navbar-light bg-light">
      <div class="container-fluid">
        <a class="navbar-brand" href="#">Navbar</a>
        <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarNav" aria-controls="navbarNav" aria-expanded="false" aria-label="Toggle
navigation">
          <span class="navbar-toggler-icon"></span>
        </button>
        <div class="collapse navbar-collapse" id="navbarNav">
          <ul class="navbar-nav">
            <li class="nav-item">
              <a class="nav-link active" aria-current="page" href="#">Home</a>
            </li>
            <li class="nav-item">
              <a class="nav-link" href="#">Features</a>
            </li>
            <li class="nav-item">
              <a class="nav-link" href="#">Pricing</a>
            </li>
          </ul>
        </div>
      </div>
    </nav>
  </form>
</body>
</html>
```

```
<li class="nav-item">
  <a class="nav-link" disabled="true" href="#" tabindex="-1" aria-
disabled="true">Disabled</a>
</li>
</ul>
</div>
</div>
</nav>
<div class="dropdown">
  <button class="btn btn-secondary dropdown-toggle" type="button"
id="dropdownMenuButton1" data-bs-toggle="dropdown" aria-expanded="false">
    Dropdown button
  </button>
  <ul class="dropdown-menu" aria-labelledby="dropdownMenuButton1">
    <li><a class="dropdown-item" href="Assignment1Q1.aspx">Question 1</a></li>
    <li><a class="dropdown-item" href="Assignment1Q2.aspx">Question 2</a></li>
    <li><a class="dropdown-item" href="Assignment1Q3">Question 3</a></li>
    <li><a class="dropdown-item" href="Assignment1Q4">Question 4</a></li>
  </ul>
</div>
</form>
</body>
</html>
```

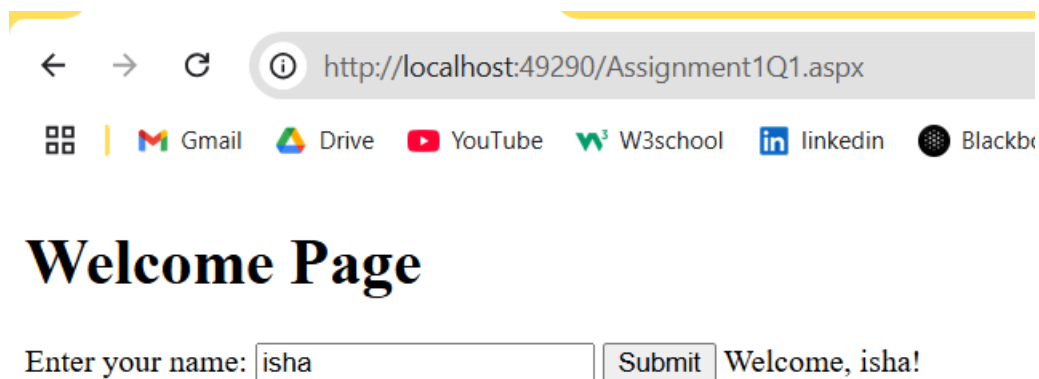
Assignment1Q1.aspx.cs Code

```
using System;

namespace Assignments
{
    public partial class WebForm1 : System.Web.UI.Page
    {
        protected void Page_Load(object sender, EventArgs e)
        {
            // Optional: Code executed on page load
        }
    }
}
```

```
}  
  
protected void btnSubmit_Click(object sender, EventArgs e)  
{  
    string name = txtName.Text;  
    if (!string.IsNullOrEmpty(name))  
    {  
        lblMessage.Text = "Welcome, " + name + "!";  
    }  
    else  
    {  
        lblMessage.Text = "Please enter your name.";  
    }  
}  
}
```

Output Screenshot:



2. Create ASP.NET page to generate the Temperature Conversion.

Assignment1Q2.aspx Code

```
<%@ Page Language="C#" AutoEventWireup="true"
CodeFile="Assignment1Q2.aspx.cs" Inherits="Assignments.WebForm2" %>

<!DOCTYPE html>
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
  <title>Temperature Conversion</title>
</head>
<body>
  <form id="form1" runat="server">
    <div style="text-align: center; margin-top: 50px;">
      <h2>Temperature Conversion</h2>

      <label for="txtTemperature">Enter Temperature:</label>
      <asp:TextBox ID="txtTemperature" runat="server"></asp:TextBox>
      <br /><br />

      <asp:RadioButtonList ID="rblConversionType" runat="server">
        <asp:ListItem Text="Celsius to Fahrenheit" Value="CtoF"
Selected="True"></asp:ListItem>
        <asp:ListItem Text="Fahrenheit to Celsius" Value="FtoC"></asp:ListItem>
      </asp:RadioButtonList>
      <br />

      <asp:Button ID="btnConvert" runat="server" Text="Convert"
OnClick="btnConvert_Click" />
      <br /><br />

      <asp:Label ID="lblResult" runat="server" Text="" Font-
Bold="True"></asp:Label>
    </div>
  </form>
```

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

Assignment1Q2.aspx.cs Code

```
using System;

namespace Assignments
{
    public partial class WebForm2 : System.Web.UI.Page
    {

        protected void btnConvert_Click(object sender, EventArgs e)
        {
            // Check if input is valid
            if (double.TryParse(txtTemperature.Text, out double temperature))
            {
                string conversionType = rblConversionType.SelectedValue;
                double result;

                if (conversionType == "CtoF")
                {
                    // Convert Celsius to Fahrenheit
                    result = (temperature * 9 / 5) + 32;
                    lblResult.Text = $"{temperature}°C = {result:F2}°F";
                }
                else if (conversionType == "FtoC")
                {
                    // Convert Fahrenheit to Celsius
                    result = (temperature - 32) * 5 / 9;
                    lblResult.Text = $"{temperature}°F = {result:F2}°C";
                }
                else
                {
                    lblResult.Text = "Invalid conversion type.";
                }
            }
        }
    }
}
```

```
    }  
    else  
    {  
        lblResult.Text = "Please enter a valid numeric temperature.";  
    }  
}  
}
```

Output Screenshot :

Temperature Conversion

Enter Temperature:

25°C = 77.00°F

3. Create a component that receives two numbers from the user through a Web Form, and based on the user's selection it performs algebraic operations on the two numbers and returns the result to the Web Form. The result should be displayed in the Web Form.

Assignment1Q3.aspx code

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Assignment1Q3.aspx.cs"
Inherits="Assignment1s" %>
```

```
<!DOCTYPE html>
<html lang="en">
<head runat="server">
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Algebraic Operations</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      margin: 20px;
    }
    .form-container {
      max-width: 400px;
      margin: auto;
      padding: 20px;
      border: 1px solid #ccc;
      border-radius: 10px;
      box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
    }
    .form-container h2 {
      text-align: center;
    }
    .form-container label {
      display: block;
      margin: 10px 0 5px;
    }
    .form-container input, .form-container select, .form-container button {
      width: 100%;
      padding: 10px;
      margin-bottom: 15px;
    }
```

```
        border: 1px solid #ccc;
        border-radius: 5px;
    }
    .result {
        text-align: center;
        font-size: 1.2em;
        color: #333;
    }
    .error {
        color: red;
        text-align: center;
        font-size: 1.1em;
    }
}
</style>
</head>
<body>
    <form id="form1" runat="server">
        <div class="form-container">
            <h2>Algebraic Operations</h2>

            <label for="txtNumber1">Enter First Number:</label>
            <asp:TextBox ID="txtNumber1" runat="server"></asp:TextBox>
            <br />

            <label for="txtNumber2">Enter Second Number:</label>
            <asp:TextBox ID="txtNumber2" runat="server"></asp:TextBox>
            <br />

            <label for="ddlOperation">Select Operation:</label>
            <asp:DropDownList ID="ddlOperation" runat="server">
                <asp:ListItem Text="Addition" Value="Add"></asp:ListItem>
                <asp:ListItem Text="Subtraction" Value="Subtract"></asp:ListItem>
                <asp:ListItem Text="Multiplication" Value="Multiply"></asp:ListItem>
                <asp:ListItem Text="Division" Value="Divide"></asp:ListItem>
            </asp:DropDownList>
            <br />

            <asp:Button ID="btnCalculate" runat="server" Text="Calculate"
OnClick="btnCalculate_Click" />
            <br />
        </div>
    </form>
</body>
</html>
```



```
<asp:Label ID="lblResult" runat="server" CssClass="result"></asp:Label>
<asp:Label ID="lblError" runat="server" CssClass="error"></asp:Label>
</div>
</form>
</body>
</html>
```

Assignment1Q3.aspx.cs Code

using System;

```
public partial class Assignment1 : System.Web.UI.Page
{
    protected void btnCalculate_Click(object sender, EventArgs e)
    {
        double number1, number2;
        lblError.Text = string.Empty; // Clear any previous error messages
        lblResult.Text = string.Empty; // Clear the previous result

        // Validate input
        if (!double.TryParse(txtNumber1.Text, out number1) || !double.TryParse(txtNumber2.Text,
out number2))
        {
            lblError.Text = "Please enter valid numbers.";
            return;
        }

        string operation = ddlOperation.SelectedValue;
        double result;

        try
        {
            switch (operation)
            {
                case "Add":
                    result = number1 + number2;
                    break;
                case "Subtract":
```

```
        result = number1 - number2;
        break;
    case "Multiply":
        result = number1 * number2;
        break;
    case "Divide":
        if (number2 == 0)
        {
            lblError.Text = "Division by zero is not allowed.";
            return;
        }
        result = number1 / number2;
        break;
    default:
        lblError.Text = "Invalid operation.";
        return;
    }

    lblResult.Text = $"Result: {result}";
}
catch (Exception ex)
{
    lblError.Text = $"An error occurred: {ex.Message}";
}
}
```

Output ScreenShot:

Algebraic Operations

Enter First Number:

Enter Second Number:

Select Operation:

Addition ▼

Calculate

Result: 13

4. Create ASP.NET page to demonstrate “AutoPostBack” property for controls available.

Assignment1Q4.aspx Code

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Assignment1Q4.aspx.cs"
Inherits="Assignment1Q" %>
```

```
<!DOCTYPE html>
<html lang="en">
<head runat="server">
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>AutoPostBack Demonstration</title>
  <style>
    body {
      font-family: Arial, sans-serif;
      margin: 20px;
    }
    .form-container {
      max-width: 400px;
      margin: auto;
      padding: 20px;
      border: 1px solid #ccc;
      border-radius: 10px;
      box-shadow: 0 4px 8px rgba(0, 0, 0, 0.1);
    }
    label {
      display: block;
      margin-bottom: 5px;
    }
    select, input {
      width: 100%;
      padding: 10px;
      margin-bottom: 15px;
      border: 1px solid #ccc;
      border-radius: 5px;
    }
    .result {
```

```
        font-size: 1.2em;
        color: #333;
    }
</style>
</head>
<body>
    <form id="form1" runat="server">
        <div class="form-container">
            <h2>AutoPostBack Demonstration</h2>

            <label for="ddlColors">Select a Color:</label>
            <asp:DropDownList ID="ddlColors" runat="server" AutoPostBack="true"
OnSelectedIndexChanged="ddlColors_SelectedIndexChanged">
                <asp:ListItem Text="-- Select Color --" Value="" />
                <asp:ListItem Text="Red" Value="Red" />
                <asp:ListItem Text="Blue" Value="Blue" />
                <asp:ListItem Text="Green" Value="Green" />
            </asp:DropDownList>

            <label for="chkEnable">Enable Greeting:</label>
            <asp:CheckBox ID="chkEnable" runat="server" AutoPostBack="true"
OnCheckedChanged="chkEnable_CheckedChanged" />

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

Assignment1Q4.aspx.cs Code

```
using System;

public partial class Assignment1Q : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {
        if (!IsPostBack)
        {

```

```
// Initialize message or any controls if needed
lblMessage.Text = "Please select a color or check the box.";
}
}

protected void ddlColors_SelectedIndexChanged(object sender, EventArgs e)
{
    string selectedColor = ddlColors.SelectedValue;

    if (!string.IsNullOrEmpty(selectedColor))
    {
        lblMessage.Text = $"You selected: {selectedColor}";
        lblMessage.Style["color"] = selectedColor.ToLower();
    }
    else
    {
        lblMessage.Text = "Please select a valid color.";
        lblMessage.Style.Remove("color");
    }
}

protected void chkEnable_CheckedChanged(object sender, EventArgs e)
{
    if (chkEnable.Checked)
    {
        lblMessage.Text = "Greeting enabled! Hello!";
    }
    else
    {
        lblMessage.Text = "Greeting disabled.";
    }
}
}
```

Output Screenshot

AutoPostBack Demonstration

Select a Color:

Blue ▼

Enable Greeting: ☐

You selected: Blue