

## Experiment – 3

**Aim:** Implement the calculator with the help of the Command argument and command name properties of the button control.

**Procedure:**

- Create GUI in which user has the facility enter two number and facility to perform the Addition, subtraction, multiplication and division operation
- The Division Operation Should not suffers from the Divide by zero error.

**Code:**

**Calculator.aspx:**

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

<!DOCTYPE html>

<html xmlns="http://www.w3.org/1999/xhtml">
<head runat="server">
    <title></title>
</head>
<body>
    <form id="form1" runat="server">
        <div style="height: 254px; width: 426px">
            <asp:Label ID="Label1" runat="server" Text="Number 1: "></asp:Label>
            <asp:TextBox ID="TextBox1" runat="server" Height="24px" Width="183px"></asp:TextBox>
            <br />
            <asp:Label ID="Label2" runat="server" Text="Number 2: "></asp:Label>
            <asp:TextBox ID="TextBox2" runat="server" Height="24px" Width="183px"></asp:TextBox>
            <br />
            <br />
            <asp:Label ID="Label3" runat="server" Text="Result: "></asp:Label>
            <asp:TextBox ID="Result" runat="server" Height="24px" Width="182px" style="margin-top:
0px; margin-left: 27px;"></asp:TextBox>
            <br />
            <br />
            <asp:Button ID="Button1" runat="server" CommandName="Add" OnCommand="calculate"
Text="ADD" style="margin-right:20px;" />
            <asp:Button ID="Button2" runat="server" CommandName="Sub" OnCommand="calculate"
Text="SUB" style="margin-right:20px;" />
            <asp:Button ID="Button3" runat="server" CommandName="Mul" OnCommand="calculate"
Text="MUL" style="margin-right:20px;" />
            <asp:Button ID="Button4" runat="server" CommandName="Div" OnCommand="calculate"
Text="DIV" />
        </div>
    </form>
</body>
```

### Calculator.aspx.cs:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

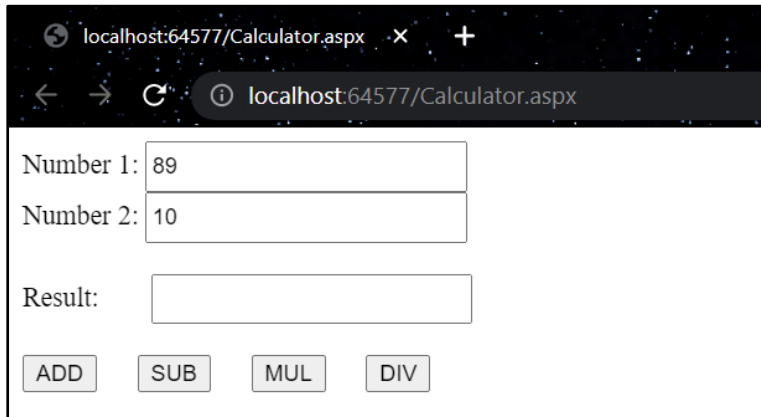
public partial class Calculator : System.Web.UI.Page
{
    protected void Page_Load(object sender, EventArgs e)
    {

    }

    protected void calculate(object sender, CommandEventArgs e)
    {
        if (e.CommandName.ToString() == "Add")
        {
            Result.Text = Convert.ToString(Convert.ToInt32(TextBox1.Text) +
            Convert.ToInt32(TextBox2.Text));
        }
        else if (e.CommandName.ToString() == "Sub")
        {
            Result.Text = Convert.ToString(Convert.ToInt32(TextBox1.Text) -
            Convert.ToInt32(TextBox2.Text));
        }
        else if (e.CommandName.ToString() == "Mul")
        {
            Result.Text = Convert.ToString(Convert.ToInt32(TextBox1.Text) *
            Convert.ToInt32(TextBox2.Text));
        }
        else if (e.CommandName.ToString() == "Div")
        {
            int number1 = Convert.ToInt32(TextBox1.Text);
            int number2 = Convert.ToInt32(TextBox2.Text);
            if (number2 == 0)
            {
                Result.Text = "Error: DivideByZero";
            }
            else
            {
                Result.Text = Convert.ToString(number1 / number2);
            }
        }
    }
}
```

## Output Screenshots:

### Input:



localhost:64577/Calculator.aspx

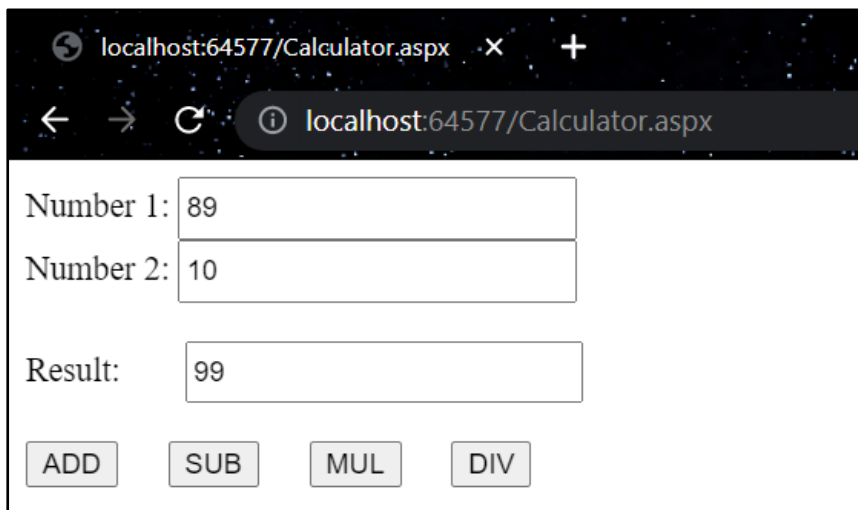
Number 1:

Number 2:

Result:

### Output:

#### Addition-



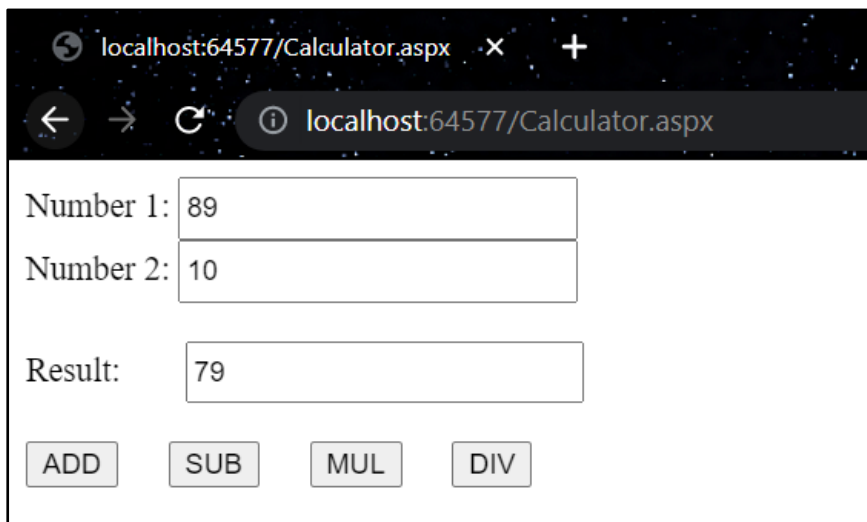
localhost:64577/Calculator.aspx

Number 1:

Number 2:

Result:

#### Subtraction-



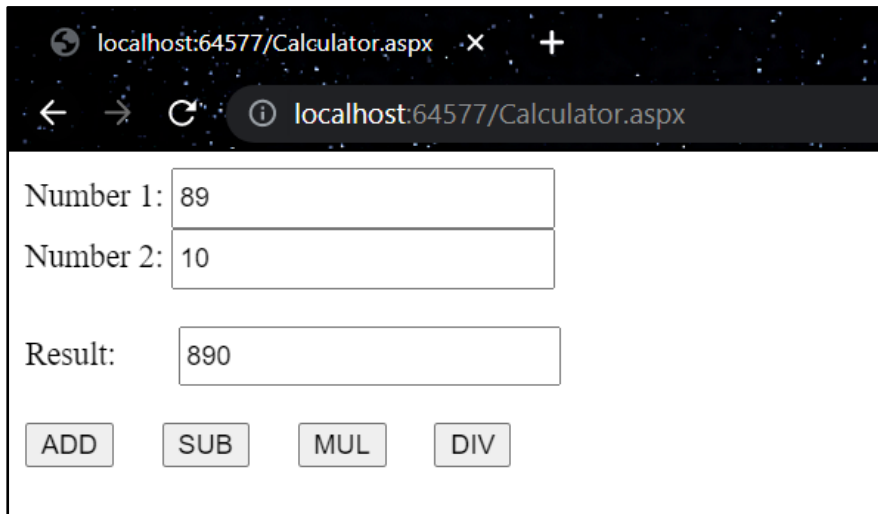
localhost:64577/Calculator.aspx

Number 1:

Number 2:

Result:

## Multiplication-



localhost:64577/Calculator.aspx

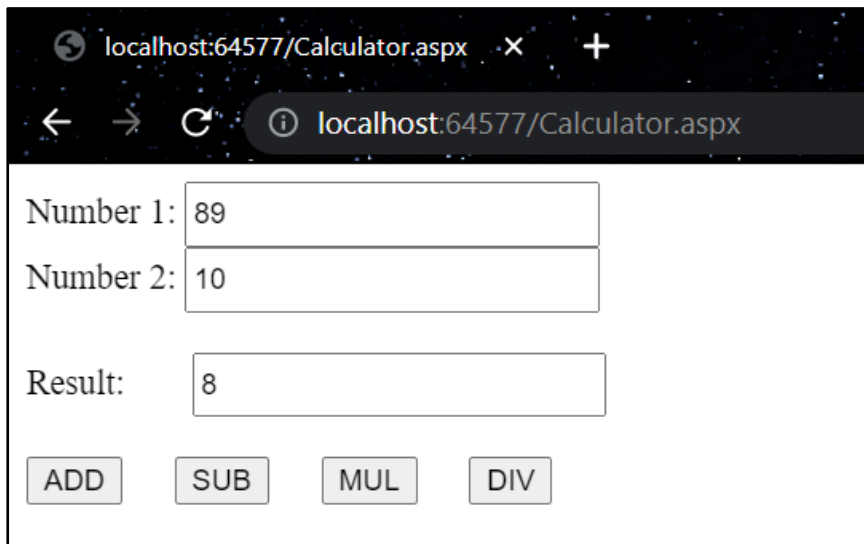
Number 1: 89

Number 2: 10

Result: 890

ADD SUB MUL DIV

## Division-



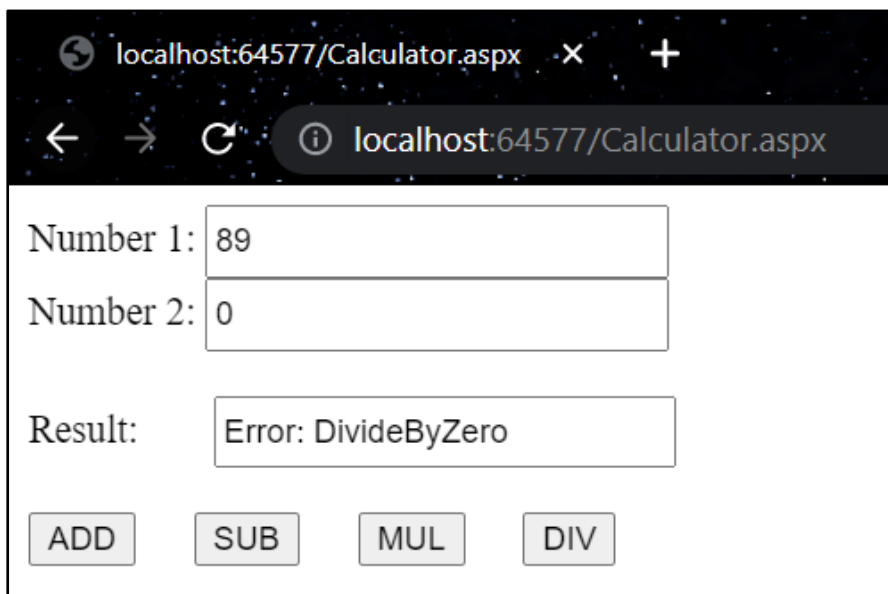
localhost:64577/Calculator.aspx

Number 1: 89

Number 2: 10

Result: 8

ADD SUB MUL DIV



localhost:64577/Calculator.aspx

Number 1: 89

Number 2: 0

Result: Error: DivideByZero

ADD SUB MUL DIV