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<%@ Page Language="VB" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/
xhtml1/DTD/xhtml1-transitional.dtd">

<script runat="server">

    Protected Sub ButtonAdd_Click(ByVal sender As Object, ByVal e As System.EventArgs)
        Dim x1, x2 As Integer
        Dim Err As Boolean
        GetInput(x1, x2, Err)
        If Err Then
            Exit Sub
        End If
        Labell.Text = "The sum is: " & AddFun(x1, x2)
    End Sub

    Protected Sub ButtonAddSub_Click(ByVal sender As Object, ByVal e As System.EventArgs)
        Dim x1, x2 As Integer
        Dim Err As Boolean
        Dim sum As Integer
        GetInput(x1, x2, Err)
        If Err Then
            Exit Sub
        End If
        AddSub(x1, x2, sum)
        Labell.Text = "The sum is: " & sum
    End Sub

    Protected Sub GetInput(ByRef x1 As Integer, ByRef x2 As Integer, ByRef Err As
    Boolean)
        Err = False
        Try
            x1 = CType(TextBox1.Text, Integer)
        Catch ex As Exception
            ' This is a side effect
            Labell.Text = "Number 1 should be an integer."
            Err = True
        End Try
        x2 = TextBox2.Text
    End Sub

    Protected Function AddFun(ByVal x As Integer, ByVal y As Integer) As Integer
        Dim sum As Integer = 0
        sum = x + y
        Return sum
    End Function

    Protected Sub AddSub(ByVal x As Integer, ByVal y As Integer, ByRef sum As Integer)
        sum = x + y
    End Sub

</script>

<html xmlns="http://www.w3.org/1999/xhtml" >
<head runat="server">
    <title>Untitled Page</title>
</head>
<body>
    <form id="form1" runat="server">
        <div>
            <strong>Add two Integers: Function vs. Subroutine<br />
            </strong>
            <br />
        </div>
    </form>
</body>
</html>
```

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    Number 1*:
    <asp:TextBox ID="TextBox1" runat="server"></asp:TextBox><br />
Number 2*:
    <asp:TextBox ID="TextBox2" runat="server"></asp:TextBox>
    <asp:RequiredFieldValidator ID="RequiredFieldValidator1" runat="server"
ControlToValidate="TextBox2"
        Display="Dynamic" ErrorMessage="This is a required field" SetFocusOnError=
"True" InitialValue="*"></asp:RequiredFieldValidator>
    <asp:CompareValidator ID="CompareValidator1" runat="server" ControlToValidate=
"TextBox2"
        Display="Dynamic" ErrorMessage="You need to enter an integer!" Operator=
"DataTypeCheck" SetFocusOnError="True"
        Type="Integer"></asp:CompareValidator><br />
    <asp:Button ID="ButtonAdd" runat="server" Text="Add by Function" OnClick=
"ButtonAdd_Click" />
    <asp:Button ID="ButtonAddSub" runat="server" Text="Add by Subroutine" OnClick=
"ButtonAddSub_Click" />
    <br />
    <asp:Label ID="Label1" runat="server" Text=""></asp:Label>
</div>
</form>
</body>
</html>
```