```
Imports System
     Imports System.Collections.Generic
     Imports System.Data
     Imports System.Data.OleDb
     Imports System.Data.SqlClient
 6
     Imports System.Web.UI.WebControls
 7
8
    Partial Class SearchBooks
9
        Inherits System. Web. UI. Page
10
         Dim control As New Controller
11
         Dim conn As OleDbConnection = control.GetConnection()
         Private Shared bookList As New List (Of Tuple (Of String, String, String)) ()
12
13
         Private Shared ch purchase As New List (Of CheckBox)
14
         Private Shared tb qtities As List (Of TextBox)
15
16
         Protected Sub LoadTable()
17
             Dim cellCtr As Integer
             Dim cellCnt As Integer
18
19
            Dim tRowNum As Integer
20
            cellCnt = 4
21
22
            If bookList.Count > 0 Then
23
                 For Each tup As Tuple (Of String, String, String) In bookList
                     Dim tRow As New TableRow()
2.4
25
                     For cellCtr = 1 To cellCnt
26
                         Dim tCell As New TableCell()
27
28
                         If cellCtr = 1 Then 'Book Title
29
                              Dim hypLink As New HyperLink
30
                              hypLink.ID = "hl " + cellCtr.ToString + " " + tRowNum.ToString
31
                             hypLink.Text = tup.Item2.ToString()
32
                              hypLink.NavigateUrl = "BookInfo.aspx?&isbn=" &
                              tup.Item1.ToString()
33
                              tCell.Controls.Add(hypLink)
34
                         ElseIf cellCtr = 2 Then 'Price
                              tCell.Text = "$" + tup.Item3.ToString()
35
                         ElseIf cellCtr = 3 Then 'Purchase Checkbox
36
37
                              Dim chk As New CheckBox With {
38
                                  .ID = Convert.ToString(tRowNum) & " " & Convert.ToString(
                                  cellCtr) }
39
                              'AddHandler chk.CheckedChanged, AddressOf Me.chkChanged click
40
41
                              ch purchase. Add (chk)
42
                              tCell.Controls.Add(chk)
43
                         ElseIf cellCtr = 4 Then 'qty
44
                              Dim tb qty As New TextBox
45
                              tb qty.ID = Convert.ToString(tRowNum) & " " & Convert.ToString(
                              cellCtr)
46
47
                              'tb qtities.Add(tb qty)
48
                              tCell.Controls.Add(tb qty)
49
50
                         End If
51
52
                         tRow.Cells.Add(tCell)
53
                     Next.
54
                     tRowNum = tRowNum + 1
55
                     tbl booksearch.Rows.Add(tRow)
56
                 Next
57
             End If
58
        End Sub
59
60
         'Protected Sub chkChanged click(sender As Object, e As EventArgs)
61
              Dim update As New CheckBox
62
              'update = bookList.IndexOf(sender)
63
         'End Sub
64
65
         Protected Sub btnSearch Click(sender As Object, e As EventArgs) Handles
         btn search.Click
```

```
66
              bookList.Clear()
 67
              Dim Sql As String
 68
              Dim priceqry As String
 69
              Dim cmd As New OleDb.OleDbCommand()
 70
              If 110.Checked = True Then
 71
                  Sql = "SELECT ISBN, Title, Price FROM Books WHERE Price <= 10"
 72
                  cmd = New OleDb.OleDbCommand(Sql, conn)
 73
              ElseIf p20.Checked = True Then
 74
                  Sql = "SELECT ISBN, Title, Price FROM Books WHERE 10 < Price and Price <= 20"
 75
                  cmd = New OleDb.OleDbCommand(Sql, conn)
 76
              ElseIf p30.Checked = True Then
 77
                  Sql = "SELECT ISBN, Title, Price FROM Books WHERE 20 < Price and Price <= 30"
 78
                  cmd = New OleDb.OleDbCommand(Sql, conn)
 79
              ElseIf p40.Checked = True Then
                  Sql = "SELECT ISBN, Title, Price FROM Books WHERE 30 < Price and Price <= 40"
 80
 81
                  cmd = New OleDb.OleDbCommand(Sql, conn)
 82
              ElseIf o40.Checked = True Then
 83
                  Sql = "SELECT ISBN, Title, Price FROM Books WHERE 40 < Price"
 84
                  cmd = New OleDb.OleDbCommand(Sql, conn)
 85
              ElseIf String.IsNullOrEmpty(tb search.Text) Then 'if there is no search
              keyword, get all books
 86
                  sql = "SELECT ISBN, Title, Price FROM Books"
 87
                  cmd = New OleDb.OleDbCommand(sql, conn)
 88
              Else
 89
                  If rb Title.Checked = True Then
 90
                      sql = "SELECT ISBN, Title, Price FROM Books WHERE [Title] LIKE '%" &
                      tb search.Text & "%'"
 91
                  ElseIf rb Author.Checked = True Then
                      sql = "SELECT Books.ISBN, Books.Title, Books.Price " +
 92
 93
                               "FROM (Authors INNER JOIN Writtenby ON Authors.[AID] =
                               Writtenby.[AID]) " +
 94
                               "INNER JOIN Books ON Writtenby.[ISBN] = Books.[ISBN] where
                              Authors.[Name] LIKE '%" & tb search. Text & "%';"
 95
                  End If
 96
 97
                  cmd = New OleDb.OleDbCommand(sql, conn)
 98
                  'cmd.Parameters.AddWithValue("@keyword", tb search.Text)
 99
              End If
100
              conn.Open()
101
              Dim dbSearch = cmd.ExecuteReader()
102
103
             If dbSearch.HasRows Then
104
                  While dbSearch.Read()
105
                      Dim newtuple As Tuple (Of String, String, String) = New Tuple (Of String,
                      String, String) (dbSearch.Item(0).ToString(), dbSearch.Item(1).ToString
                       (), dbSearch.Item(2).ToString())
106
                      bookList.Add(newtuple)
107
                  End While
108
              End If
109
              conn.Close()
110
              cmd.Dispose()
111
              LoadTable()
112
          End Sub
113
          Protected Sub btn Purchase Click (sender As Object, e As EventArgs) Handles
114
          btn Purchase.Click
115
116
              'For Each chb As CheckBox In ch purchase
117
                   Dim newRoy As String
118
                   Dim parsas As Array
119
                   Dim cellx As Integer
120
                   Dim celly As Integer
121
                   Dim value As TextBox
122
                   Dim chb Checked As CheckBox
123
                   Dim royalty As String
              •
124
                   Dim isbn As String
125
              •
                   Dim cid As String
126
                   Dim qty As String
127
                   newRoy = chb.ID
```

```
parsas = newRoy.Split(" ").ToArray()
129
                  celly = parsas.GetValue(0)
130
                  cellx = parsas.GetValue(1)
                   chb Checked = DirectCast(tbl booksearch.Rows(celly + 1).Cells(cellx -
131
              3).Controls.Item(0), CheckBox)
132
133
                  If chb.Checked = True Then
134
                      newRoy = chb.ClientID
              •
135
                       parsas = newRoy.Split(" ").ToArray()
              •
136
                       celly = parsas.GetValue(0)
137
                       cellx = parsas.GetValue(1)
138
139
                       'value = Table1.Rows(celly + 1).Cells(cellx - 3).Controls.Item(0) 'out
              of 5 cells
140
                       'royalty = value. Text 'this gets the updated royalties
141
                       isbn = tbl booksearch.Rows(celly + 1).Cells(cellx - 3).Text
142
                       qty = tbl booksearch.Rows(celly + 1).Cells(cellx - 2).Text
143
144
                       conn = control.GetConnection()
145
                       Dim sql As String = "INSERT INTO Orders ([ISBN], [CID], [Quantity])
              VALUES (@isbn, @cid, @qty)"
146
                      Dim cmd As New OleDb.OleDbCommand(sql, conn)
                      cmd.Parameters.AddWithValue("@isbn", isbn)
147
              •
148
                      cmd.Parameters.AddWithValue("@cid", cid)
149
                       cmd.Parameters.AddWithValue("@qty", qty)
150
                       conn.Open()
151
                       cmd.ExecuteNonQuery()
152
                       cmd.Dispose()
153
                       conn.Close()
154
                  End If
             'Next
155
156
              message.Text = "Purchasing is Offline at the time. Please try back later."
157
158
159
          'Protected Sub btn Purchase Click2(sender As Object, e As EventArgs) Handles
          btn Purchase.Click
160
               For Each row As TableRow In tbl booksearch. Rows
161
                   Dim chbox As New CheckBox
162
                   chbox = row.Cells(2).Text
163
               Next
164
          'End Sub
165
166
          Protected Sub Page Load (sender As Object, e As EventArgs) Handles Me.Load
167
              If control.GetAdmin = True Then
168
                  adminTab.Visible = True
                  custTab.Visible = False
169
170
             Else
171
                  adminTab.Visible = False
172
                  custTab.Visible = True
173
              End If
174
          End Sub
    End Class
175
176
```