

Exercise 11, LINQ method syntax

Chapter 12 uses a combination of both LINQ query and method syntax. The method syntax is a popular alternative to the query syntax.

For example, in StudentApp, the DisplayStudent procedure uses the following LINQ query to find and display all students with 12 or more credits.

```
Dim fulltime = From s In students
                Where s.CurrentCredits >= 12
                Select s.StudentFullName
```

The first statement can also be written as follows:

```
Dim fulltime = students.Where(Function(s) s.CurrentCredits >=
12).Select(Function(s) s.StudentFullName)
```

The btnSearch_Click procedure finds all student full names matching the specified student first name.

```
Dim match = From s In students
             Where s.StudentLastName.ToLower.Contains(txtName.Text.ToLower)
```

This can be written as:

```
Dim match = students.Where(Function(s)
s.StudentLastName.ToLower.Contains(txtName.Text.ToLower))
```

The lstResults_SelectedIndexChanged procedure uses a set of student full names to find the index of name selected from a ListBox.

```
Dim match = From s In students
             Where s.StudentFullName.ToLower.Contains(lstResults.Text.ToLower)

bsStudents.Position = students.IndexOf(match.First)
```

The equivalent initial statement using LINQ method syntax is:

```
Dim match = students.Where(Function(s) s.StudentFullName = lstFullTime.Text)
```

Our most recent enhancement to EmployeeApp included 4 LINQ expressions similar to the following:

- DisplayEmp contains the following two statements, which determine the sum of the monthly and annual salaries.

```
lblMontlyTotal.Text = (From ee In emps
                        Select ee.MonthlySalary).Sum.ToString("C")
```

```
lblAnnualTotal.Text = (From ee In emps
                        Select ee.AnnualSalary).Sum.ToString("C")
```

- txtSearch_TextChanged contains a LINQ expression that returns the employees with matching names.

```
Dim match = From ee In emps
             Where ee.Name.ToLower.StartsWith(txtSearch.Text.ToLower)
```

```
lstEmps.DataSource = match.ToArray
bsEmployees.Position = emps.IndexOf(match.First)
```

- lstResults_SelectedIndexChanged declares *empsFound* to represent the employee(s) with the name selected by the user.

```
Dim match = From ee In emps
             Where ee.Name = lstEmps.Text
```

```
bsEmployees.Position = emps.IndexOf(match.First)
```

1. Use LINQ method syntax to rewrite the statements in your solution that are similar to the above.
2. Upload the modified solution.