

```
1 //using is a directive
2 //System is a name space
3 //name space is a collection of features that our needs to run
4 using System;
5 using System.Collections.Generic;
6 using System.Linq;
7 //public means accessible anywhere
8 //partial means this class is split over multiple files
9 //class is a keyword and think of it as the outermost level of grouping
10 //:System.Web.UI.Page means our page inherits the features of a Page
11 public partial class _Default : System.Web.UI.Page
12 {
13     protected void Button1_Click(object sender, EventArgs e)
14     {
15         sampLabel.Text = ""; //clear label on button click
16         decimal[] salaries = new decimal[] { 56789, 78888, 35555, 34533, 75000 }; //make array of salaries
17
18         //construct Linq query, which produces a collection of formatted strings
19         IEnumerable<string> salResults = from salary in salaries
20                                         where 35000 <= salary && salary <= 75000
21                                         orderby salary descending
22                                         select $"<br>{salary:C}";
23
24         foreach(string formattedSalary in salResults)
25         {
26             sampLabel.Text += formattedSalary; //display formatted salaries one at a time
27         }
28
29         sampLabel.Text += "<br><hr/>"; //show horizontal rule on screen
30         //make dictionary to hold names and salaries as key/value pairs
31         Dictionary<string, decimal> nameSalaries = new Dictionary<string, decimal>();
32         nameSalaries.Add("John Jones", 45355);
33         nameSalaries.Add("John Smith", 76900);
34         nameSalaries.Add("John Jenkins", 89000);
35         nameSalaries.Add("Steve Jobs", 98000);
36
37         //query below represents all people named John who make 65000 and more
38         //this query gives back a formatted string for each key/value pair that satisfies the condition
39         IEnumerable<string> dictResults = from nameSalary in nameSalaries
40                                         where nameSalary.Key.Contains("John") && nameSalary.Value >= 65000
41                                         select $"<br>{nameSalary.Key} earns {nameSalary.Value:C} per year.";
42
43         foreach (string nameSal in dictResults)
44         {
45             sampLabel.Text += nameSal; //display named and salaries
46         }
47
48     }
49 }
```