

```
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 //public means accessible anywhere
7 //partial means this class is split over multiple files
8 //class is a keyword and think of it as the outermost level of grouping
9 //:System.Web.UI.Page means our page inherits the features of a Page
10 public partial class _Default : System.Web.UI.Page
11 {
12     protected void Button1_Click(object sender, EventArgs e)
13     {
14         sampLabel.Text = ""; //clear label every time
15         Quad sqr = new Square("John", 4); //make a square
16         Quad rect = new Rectangle("Bob", 2, 5); //make a rectangle
17         Quad rect2 = new Rectangle("Jerry", 4, 5); //make another rectangle
18         Quad sqr1 = new Square("Tom", 5); //make another square
19         //stick all these shapes into a list of quads
20         List<Quad> lst = new List<Quad>(new Quad[] { sqr, rect, rect2, sqr1 });
21         lst.Sort(); //sort the list
22         foreach (Quad q in lst)
23         {
24             if (q is Square) //if it's a square
25             {
26                 //down cast to a square, and call Perimeter on it
27                 sampLabel.Text += "<br>" + ((Square)q).Perimeter();
28             }
29             else
30             {
31                 //if it's a rectangle, down cost to a rectangle, and call Perimeter
32                 sampLabel.Text += "<br>" + ((Rectangle)q).Perimeter();
33             }
34         }
35     }
36 }
37 }
38
39
40
```