```
1 using System;
   public class Quad:IComparable<Quad>//implement IComparable
 3
        private string name;//instance field
 4
 5
       public Quad(string na)
        {
 6
 7
            name = na;//set value of instance field
 8
 9
        //implement CompareTo to make list sortable
10
        //in this case, the items are sorted by name
11
       public int CompareTo(Quad other)
12
13
            if (this.name.CompareTo(other.name) < 0)</pre>
14
           {
15
                return -1;
16
            }
           else
17
18
            {
19
                return 1;
20
21
        }//put default code inside Perimeter
       public virtual string Perimeter()
22
23
       {
            return $"The perimeter of {name} is ";
24
25
26 }
27
   public class Square: Quad
28 {
29
       private double sideLength;
       public Square(string n, double s):base(n)
30
31
32
            sideLength = s;
33
       //override Perimeter, calling the base portion
34
35
        //and then adding refinement with 4*sideLength
36
       public override string Perimeter()
37
38
            return base.Perimeter()+4*sideLength;
39
        }
40
41 public class Rectangle: Quad
42 {
43
        private double sideOne, sideTwo;
       public Rectangle(string n, double s1, double s2) : base(n)
44
45
        {
46
            sideOne = s1; sideTwo = s2;
47
       //override Perimeter, calling the base portion
48
49
        //and then adding refinement with 2sideOne+2sideTwo
       public override string Perimeter()
50
51
        {
52
            return base.Perimeter() + (2*sideOne+2*sideTwo);
53
```