```
1  //using is a directive
2  //System is a namespace, namespace groups related features together
3  //System is needed so we can use Console, classes
4  using static System.Console;
5  using static System.Math;
6  //outermost level of grouping
7  abstract class ThreeDSHape//there is a concept of a three d shape
8  {
9      //abstract method because there are many different ways of
10     //finding the volumes of different shapes
11     //in other words, no default code makes sense
12     //but each shape does have the concept of a volume
13     public abstract double GetVolume();
14 }
15 class Cube : ThreeDSHape
16 {
17     private ushort side;
18     public Cube(ushort edgeLength)
19     {
20         side = edgeLength;//set instance variable
21     }
22
23     public override double GetVolume()
24     {
25         return Pow(side, 3);//return the edge length cubed side^3
26     }
27 }
28 class Sphere:ThreeDSHape
29 {
30     private ushort radius;//radius is distance from center to point on surface
31     public Sphere(ushort rad)
32     {
33         radius = rad;//set radius through constructor
34     }
35     //provide an implementation of GetVolume
36     //that is highly specific to spheres
37     public override double GetVolume()
38     {
39         //line below gets volume of sphere
40         return (4.00 / 3.00) * PI * Pow(radius, 3);
41     }
42 }
43 class Program
44 {
45     //Main is a method
46     //this is the entry point into program
47     static void Main()
48     {
49         Cube cb = new Cube(10);
50         WriteLine($"The volume of the cube is {cb.GetVolume()}");
51
52         Sphere sp = new Sphere(10);
53         WriteLine($"The volume of the sphere is {Round(sp.GetVolume(),2)}");
54     }
55 }
56
57
```