```
1 using SplashKitSDK;
2 using System;
 3 using System.IO;
 5 namespace MyGame
 6 {
7
       public abstract class Shape
 8
9
            private Color _color;
10
            private float _x;
11
            private float _y;
            private bool _selected;
12
13
14
            public Shape() : this(Color.Yellow)
15
            {
16
            }
17
18
19
            public Shape(Color color)
20
            {
21
                _color = color;
22
                _{x} = 0.0f;
23
                _y = 0.0f;
24
            }
25
26
            public Color Color
27
            {
28
                get
29
                {
30
                    return _color;
31
                }
32
                set
33
                {
34
                    _color = value;
35
                }
36
            }
37
38
            public float X
39
40
                get
41
                {
42
                    return _x;
43
                }
44
                set
45
46
                    _x = value;
47
                }
48
            }
49
```

```
E:\COS20007\week5\Task5_3C\MultipleShapeKinds\Shape.cs
```

```
2
```

```
public float Y
51
            {
52
                get
53
                {
54
                    return _y;
55
                }
56
                set
57
                {
58
                    _y = value;
                }
59
60
            }
61
62
            public bool Selected
63
            {
64
                get
65
                {
66
                    return _selected;
67
                }
68
                set
69
                {
70
                    _selected = value;
71
                }
72
            }
73
74
            public abstract void Draw();
75
76
            public abstract Boolean IsAt(Point2D pt);
77
            public abstract void DrawOutline();
78
79
80
            public virtual void SaveTo(StreamWriter writer)
81
            {
                writer.WriteColor(Color);
82
                writer.WriteLine(X);
83
84
                writer.WriteLine(Y);
85
            }
86
87
            public virtual void LoadFrom(StreamReader reader)
88
                Color = reader.ReadColor();
89
90
                X = reader.ReadInteger();
                Y = reader.ReadInteger();
91
92
            }
93
        }
94 }
95
```