

```
using System;
using System.Collections.Generic;
using System.Drawing;
using System.Linq;
using System.Text;
using System.Threading.Tasks;
using Microsoft.VisualBasic;
using ShapeDrawing;
using SplashKitSDK;
namespace ShapeDrawing
{
    public class MyRectangle : Shape
    {
        private int _width;
        private int _height;
        private const int LastDigitStudentID = 0;
        public int Width
        {
            get
            {
                return _width;
            }
            set
            {
                _width = value;
            }
        }
        public int Height
        {
            get
            {
                return _height;
            }
            set
            {
                _height = value;
            }
        }
        public MyRectangle() : this(SplashKitSDK.Color.White, 100, 80, 100, 80)
        {
        }
        public MyRectangle(SplashKitSDK.Color color, float x, float y, int width, int height) : base(color)
        {
            X = x;
            Y = y;
            Width = width;
            Height = height;
        }
    }
}
```

```
public override void Draw()
{
    SplashKit.FillRectangle(Color, X, Y, Width, Height);
    if (Selected)
    {
        DrawOutline();
    }
}

public override void DrawOutline()
{
    int Offset = 5 + LastDigitStudentID;
    float OutlineX = X - Offset;
    float OutlineY = Y - Offset;
    int OutlineWidth = _width + (2 * Offset);
    int OutlineHeight = _height + (2 * Offset);
    SplashKit.DrawRectangle(SplashKitSDK.Color.Black, OutlineX,
        OutlineY, OutlineWidth, OutlineHeight);
}

public override bool IsAt(Point2D p)
{
    return SplashKit.PointInRectangle(p, SplashKit.RectangleFrom(X, Y,
        Width, Height));
}

//Step 6 of task 5.3C
public override void SaveTo(StreamWriter writer)
{
    writer.WriteLine("Rectangle");
    base.SaveTo(writer);
    writer.WriteLine(Width);
    writer.WriteLine(Height);
}

public override void LoadFrom(StreamReader reader)
{
    base.LoadFrom(reader);
    Width = reader.ReadInteger();
    Height = reader.ReadInteger();
}
}
```