Exercise 31: The Bouncer

Although this exercise isn't worth any points, it gives you valuable programming experience. You're almost definitely going to have to complete the exercises to succeed in the course.

**Problem 1 - Getting started**

Create a new Unity project and save the current scene. Add Edge Collider 2D components to the camera on all 4 sides of the screen. Turn off gravity (in the game). Add a bouncy, no friction Physics Material 2D to all the edge colliders and the Bouncer's collider.

**Problem 2 - Bouncing is deadly**

Implement a Unity class (script) called **Bouncer** that keeps track of its health and destroys the game object it's attached to when its health reaches 0 (or below 0). Reduce the health by 10 whenever the object collides with something. You'll also need to get your object moving by adding a force in the **Start** method.

Add a sprite for your Bouncer game object to your project, add the Bouncer game object to the game, and attach a Rigidbody2D, some collider 2D, and your **Bouncer** script as components to the game object.

When you run your game, your Bouncer should be destroyed when it hits an edge of the screen for the tenth time.

**Problem 2 - Fading away**

Let's add some visual interest, where the game object fades a little on each bounce until its destroyed.

When you reduce the health, reduce the alpha value of the color for the SpriteRenderer by 0.1f also. You'll need to explore the **SpriteRenderer** and **Color** documentation to figure this out. The alpha component of a color is how opaque it is, with 1 meaning fully opaque and 0 meaning fully transparent.