

Use the HTML5 Canvas and JavaScript to complete this assignment. The JavaScript should be a separate `.js` file, not embedded in the HTML.

For this assignment, all graphics should appear on a canvas of size  $512 \times 512$  with a visible border. The page `<title>` should be the title of the program.

**forest**

Draw a picture of a forest of pine trees. Your trees should be green with brown trunks. Place the trees at random locations, so the forest changes when the page is refreshed.

**signal**

Create a traffic signal that shows as three circles, one of which is “lit” as green, yellow, or red. Provide a button that cycles through the three states.

**bounce**

Animate a ball that falls under gravity and bounces off the sides of the canvas. Add buttons that give the ball a push to the left, right, or upwards.