Madie Arcemont ASIM 1310 - Quick Final Project - Snake December 6, 2017

## Instructions:

- 1. When you arrive at the home screen, press the spacebar to start the game.
- 2. Use the arrow keys to move the snake around the screen.
- 3. Direct the snake to eat the apples as they appear on the screen (the snake must pass directly over the apple in order for it to work).
- 4. Do not let the snake run into itself. If you do, you will lose the game.
- 5. If at any point in the game you would like to return to the home screen and start a new game, hit enter.

For the timer functionality of the game, I replaced the millis with a frameCount function due to a bug that caused an initial speeding up of the game before returning to the correct speed. This replacement was made in Dr. Quick's Tuesday office hours.

Both the snake and apple are set up in respective classes. The snake is made up of individual rectangles in an array as implemented in the slinky lecture and the snakes on a surface lecture. The snake is set up to check for collisions every time it moves to ensure that the snake stays within the boundaries of the screen. To lengthen the snake, each time it runs into an apple, the addLength() function is called. This function resets the array and increases it by one square length.

The apple is set to appear randomly on the screen and reappear whenever it is eaten. However, within the eatApple() function, there is a check in place to relocate the apple if it overlaps with any part of the snake's body. The image for this apple was sourced from <a href="http://wikiclipart.com/apple-clipart\_449/">http://wikiclipart.com/apple-clipart\_449/</a>.