**Picture Lab Extension 1**

**E1: Steganography**

Steganography is the science of hiding information in a picture. You can hide a black and white message inside a color picture by first changing all the red values in the original color picture to be an even value (by subtracting one if odd). Make a picture of the same size out of the message that will be hidden. Then loop through both the original picture and the message picture, setting the red value of a pixel in the original picture to odd (by adding one to it) if the corresponding pixel in the message picture is close to the color black. Write an encode method that takes the black and white picture message and changes the current picture to hide the message picture inside of it. Then also write a decode method that returns the picture hidden in the current picture. There is example code for encode and decode in the Picture.java class in the finalClasses folder.