# HW2: Problem 1 Ian Dover

## 1 Part A

Image converted to greyscale:



Figure 1: Greyscale dimensionally reduces the image and assigns weights to RGB values to created a weighted average.

## 2 Part B

#### 2.1 Subsection 1

Image with zero-mean Gaussian white noise with variance of 0.01:



Figure 2: Greyscale image with gaussian noise applied.

#### 2.2 Subsection 2

Image with salt-and-pepper noise, affecting approximately 5% of pixels:



Figure 3: Greyscale image with salt-and-pepper noise applied.