Assignment 0 Report: Simultaneous Contrast Experiment

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Increase ΔI till there is a perceivable difference between the background and the foreground
This quantity $\frac{\Delta I}{I}$ is known as the Weber ratio.

Results:

Weber Ration = 5.33 Weber Ratio = 2.86

Figure 1: Weber Ratio for different background intensities

I = 4 I = 74 I = 154

Figure 2: Variation in the background intensity (I) for the same foreground intensity (175)

Observations:
From Figure 1, it can be stated that more is the intensity of the background, smaller ΔI is needed to perceive the difference between background and foreground and hence the lesser Weber Ratio.
From Figure 2, the foreground appears darker as the background becomes lighter.
Thus, for the same intensity of foreground for two images, the foreground appears to be darker in the case of the image with a lighter background.