HW2: Problem 2
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1   Convert Image to Greyscale

Image converted to greyscale:

Figure 1: Greyscale image.

2   Part 1

2.1   Sobel Threshold: 10

Use the sobel operator on the image with a threshold of 10:
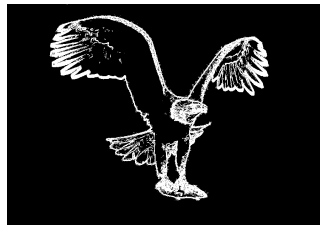

Figure 2: Sobel threshold of 10.

2.2   Sobel Threshold: 50

Use the sobel operator on the image with a threshold of 50:
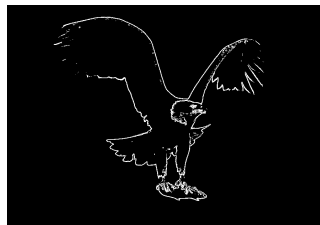

Figure 3: Sobel threshold of 50.

2.3   Sobel Threshold: 100

Use the sobel operator on the image with a threshold of 100:

Figure 4: Sobel threshold of 100.

2.4   Sobel Threshold: 150

Use the sobel operator on the image with a threshold of 150:

Figure 5: Sobel threshold of 150.

2.5   Sobel Threshold: 200

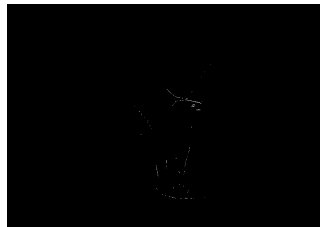Use the sobel operator on the image with a threshold of 200:

Figure 6: Sobel threshold of 200.

2.6   Sobel Threshold: 255

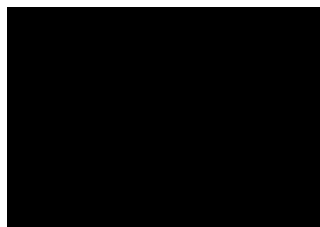Use the sobel operator on the image with a threshold of 255:

Figure 7: Sobel threshold of 255.

3   Part 2

3.1   Prewitt Threshold: 10

Use the prewitt operator on the image with a threshold of 10:
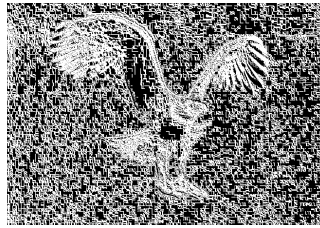

Figure 8: Prewitt threshold of 10.

3.2   Prewitt Threshold: 50

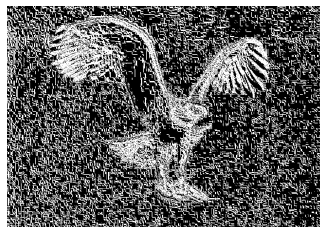Use the prewitt operator on the image with a threshold of 50:

Figure 9: Prewitt threshold of 50.

3.3   Prewitt Threshold: 100

Use the prewitt operator on the image with a threshold of 100:
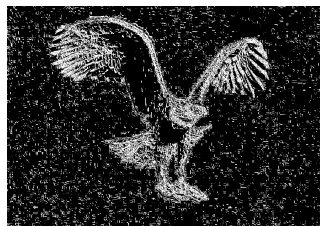

Figure 10: Prewitt threshold of 100.

3.4   Prewitt Threshold: 150

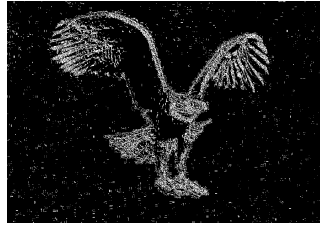Use the prewitt operator on the image with a threshold of 150:

Figure 11: Prewitt threshold of 150.

3.5   Prewitt Threshold: 200

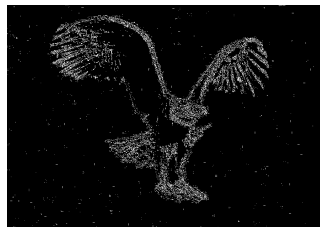Use the prewitt operator on the image with a threshold of 200:

Figure 12: Prewitt threshold of 200.

3.6   Prewitt Threshold: 255
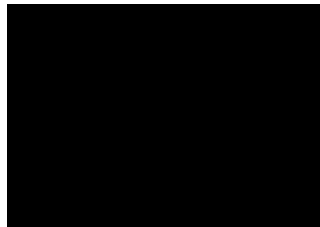
Use the prewitt operator on the image with a threshold of 255:

Figure 13: Prewitt threshold of 255.