CS 443 - Group JPEG Project

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1: The 8x8 block comparisons are included in the MATLAB Cmd window output PDF located in this folder

2: All image files from each step are included in this folder
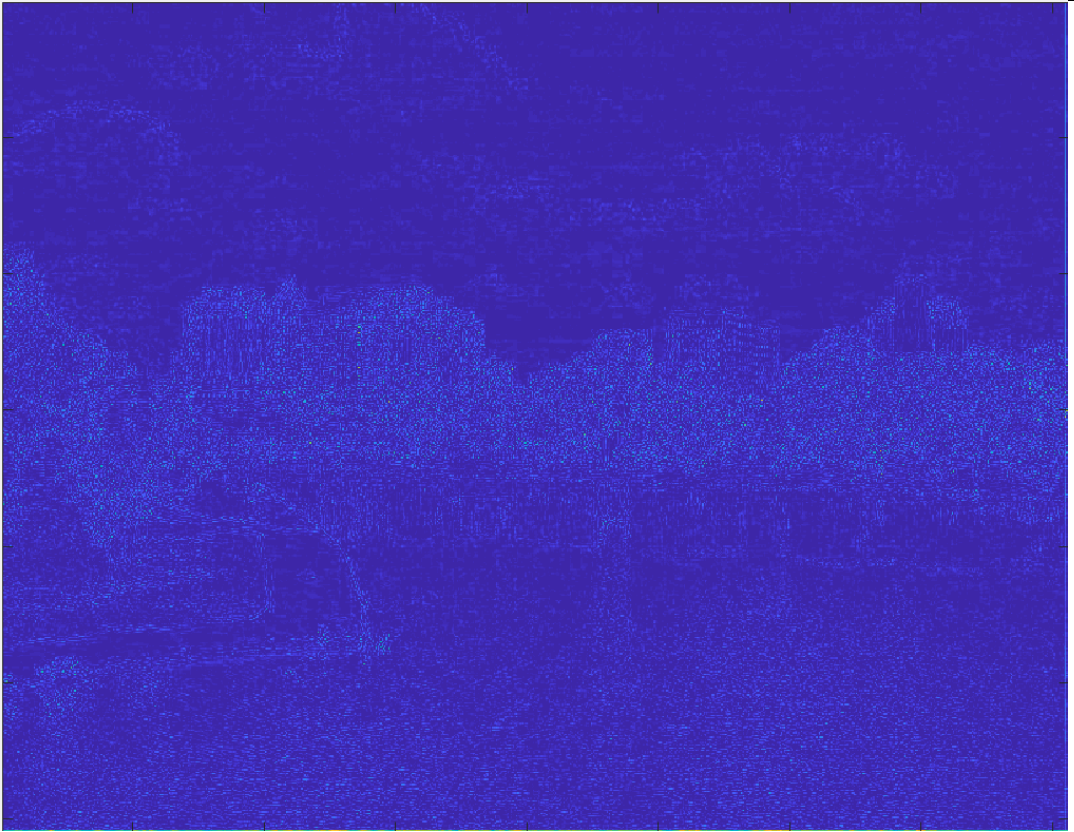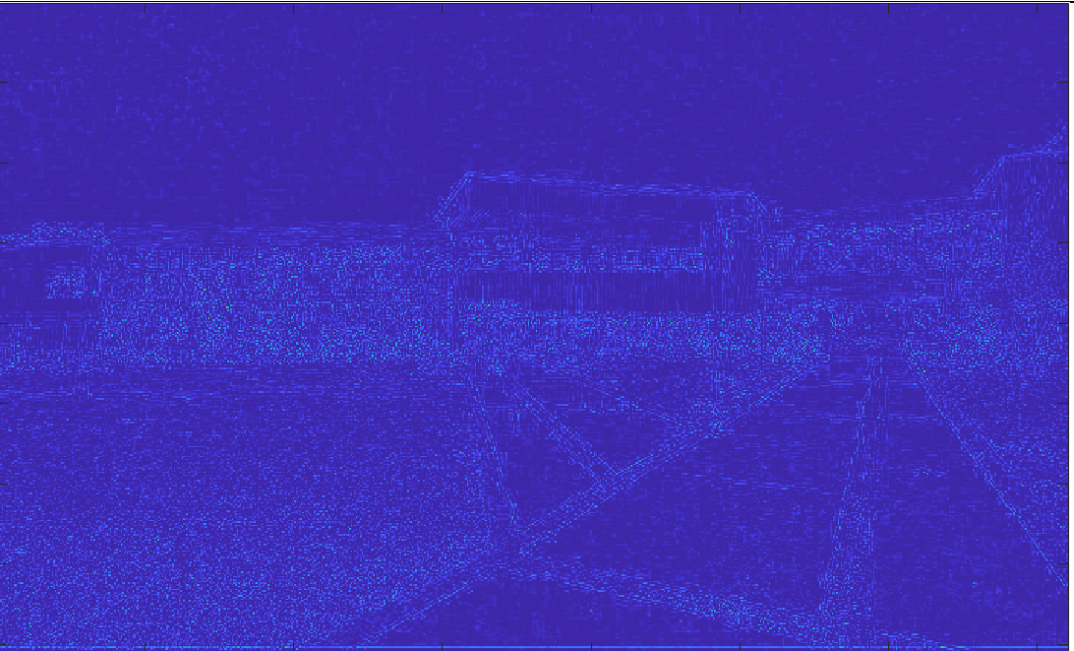
3: Observations:

At the end of step one, the image is the DCT result in frequency space, so it doesn't look anything like the original image, and it is nearly impossible to make out what it is supposed to be.
After the IDCT conversion is done, the image looks like it is supposed to. If you zoom in, it becomes obvious that the image has been compressed because it looks blockier and has jagged lines.

4:
Pixel wise error visualized with imagesc

Image1	

| Image2 | |
| Image3 | |

PSNR Values from each image:

Image 1	11.6639
Image 2	11.5201
Image 3	12.4396

The way MATLAB imagesc works, it displays an image with a color map that maps blue hues to the lowest values and green/yellow hues for the largest values. These images represent the amount of error between the original and compressed final images. As you can see from the mostly blue color of the images, there is little error in between the two images. The values for PSNR show a relatively high signal to noise ratio, meaning there is little noise, and is therefore consistent with this result. The PSNR values for each image are relatively close to each other.

5: Group Members/Responsibilities

TJ Couch - Leader - Steps 1-3
Austin Vickers - Step 4-5, Group Report, Submission
Matthew Robertson - Presentation