**Histogram Assignment Write-Up**

This assignment was fun and difficult, taking concepts from outside of this class and previous assignments and forcing us to combine them. I was able to complete the assignment exactly as specified. Converting the image to a 3d array was easy because it was just reused code. It only took 3 extra lines to store the rgb values in a histogram. Then came the statistics. Some of them were not difficult, while others were pretty easy to implement. The maximum and minimum were easy. The only difference between them was checking the bin at 255-i instead of i as we were looping downwards for the minimum. The mean was easy, and surprisingly, so was the standard deviation as it was simply implementing a math equation. The median was a little difficult because you had to store the bin count but return the bin number, but once I worked that out in my head the solution followed. The mode used similar logic of checking bin counts but storing bins but since I had just done the median it was easy to finish. I encountered some issues with writing my modified image to a directory, but after troubleshooting with Eric for awhile and learning about breakpoints it turned out I was writing my image onto itself instead of writing the original image onto a new one. With that issue fixed, the program came together.