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| Project Name: Histogram Matching |
| Module Name: Histogram |
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| Review Date: 10/18/2020 |

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| Test ID | Test Scenario | Test Case | Test Data | Expected Results | Actual Results | Remarks |
| 1. | Verify program compiles | Compile and Run program from command line | python Histogram.py | Program Compiles and launches | Program successfully compiled and ran | Passed Test |
| 2. | Verify ability to convert image to Greyscale | Provide RGB image and display output | 1.RGB Image | Image is loaded into program and converted to Greyscale | Upon printing out the output of RGB2Greyscale(), new image is greyscale | Passed Test |
| 3. | Verify Greyscale Histogram is calculated | Provide RGB image, convert to greyscale and get histogram | 1.RGB image | Images is converted and the greyscale histogram has values from 0 – 255 | Image is transformed to greyscale and displayed. Printing Histogram shows values only from 0-255 in array. | Passed Test |
| 4. | Verify normalized histogram is calculated | Provide RGB image, convert to greyscale, get histogram and then normalize it | 1.Verify Number of Pixels is correct  2.Verify array is updated | Number of pixels = row\*columns  Frequency/Num Pixels | Printed out value and it matched  Printed out array to verify updates | Passed Test |
| 5. | Verify Equalized Histogram is calculated | Run Program up till equalized histogram | 1.RGB Image | Display equalized histogram image | Displayed the image with equalized histogram applied | Passed Test |
| 6. | Verify Histogram Matching runs | Provide greyscale image and Histogram to match it against | 1.Greyscale image, Histogram | New matched image | New matched image | Passed Test |