

## Stage 2

This stage starts with histograms. So firstly I executed the code, got results and uploaded them in folder named Cumulative histograms. The code executed was CumulativeHistogram.java. And I also have CumulativeHistogram2.java since firstly I thought I did incorrectly and tried to develop another one, but got the same result. So, both codes work as expected.

I chose Jack as my benchmark, since Jack maintains Standard behavior. In this subtask, I created three java plugins, but two of those were wrong. So, firstly I misunderstood the problem and created MatchHistogram.java, then did not separated the channels and just did histogram matching. So, I got failed on this. See the results below...

Original images



On applying MatchHistogram.java



On Binary layer 0



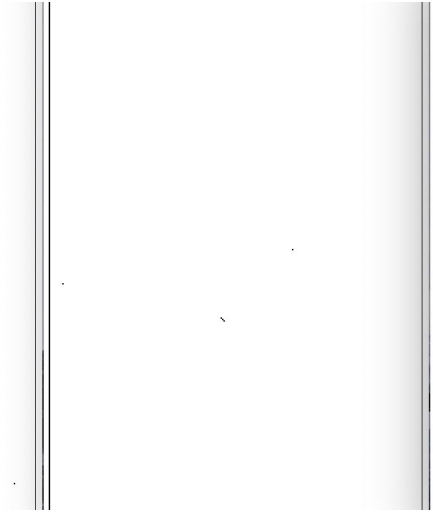
On Binary layer 1



On Binary layer 2



### On Binary Layer 3



So, to be honest I got disappointed. The best result was in case of Binary Layer 1. But, this proved I was doing wrong. Then I went into docs over again, and understood that I needed to do with separate channels for r, g and b.

Next plugin I did not save since it was not correct and I did not even post on Github. It made all the image in a reddish shade and did much better than the previous was, but was bad in general.

The third attempt was successful. The code is in Matching.java. So the wrong part that made my image reddish in the previous one was misplacing i and j iterators as pixels and some other minor things that I can't remember right now. Anyway, see the results below.



