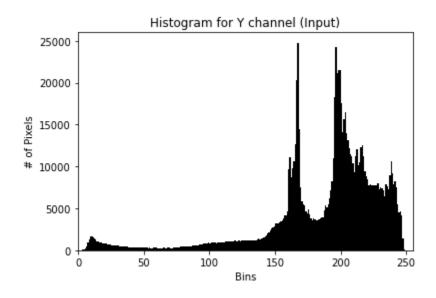
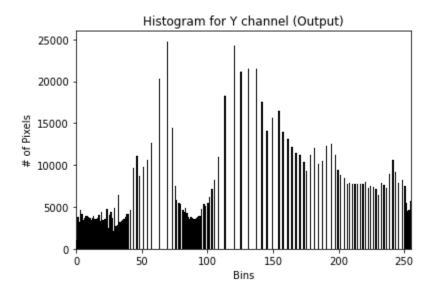
Original image:



Histogram of Y_in:



Histogram of Y_out:



After merging Y_out with Cb Cr:

