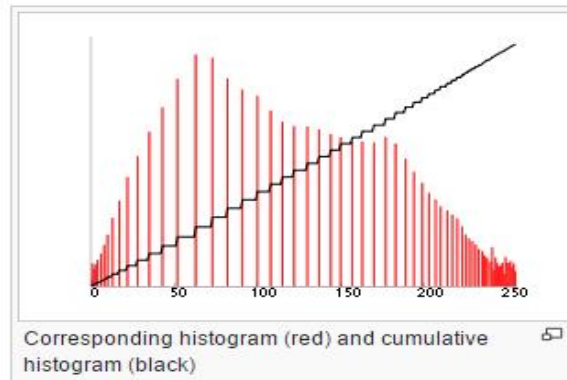
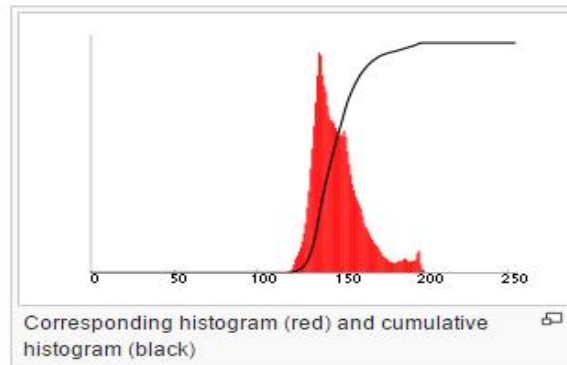


HISTOGRAM EQUILIZATION

Histogram equalization is a technique for adjusting image intensities to enhance contrast.

Histogram equalization uses two important concepts. They are PMF and CDF.

It is not necessary that contrast will always be increase in this. There may be some cases were histogram equalization can be worse. In that cases the contrast is decreased.



PMF (Probability Mass Function)

Calculates the PMF of all the pixels in this image. PMF helps to calculate the probability of each pixel value in an image.

CDF (Cumulative Distributive Function)

Then calculate CDF. It gives the cumulative sum of these values. CDF is multiplied by levels, to find the new pixel intensities, which are mapped into old values, and histogram is equalized.

References:

- <https://en.wikipedia.org>
- <http://docs.opencv.org/>
- <http://www.math.uci.edu/>

