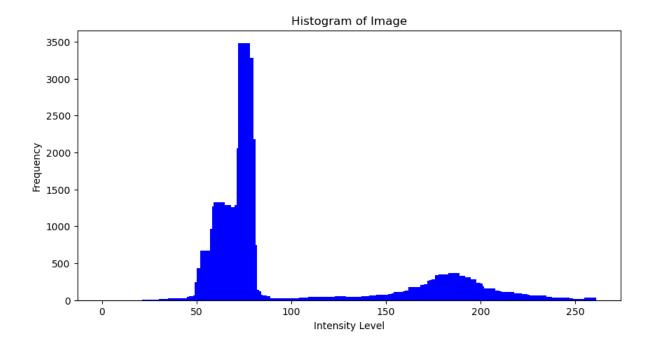
DIP ASSIGNMENT 01

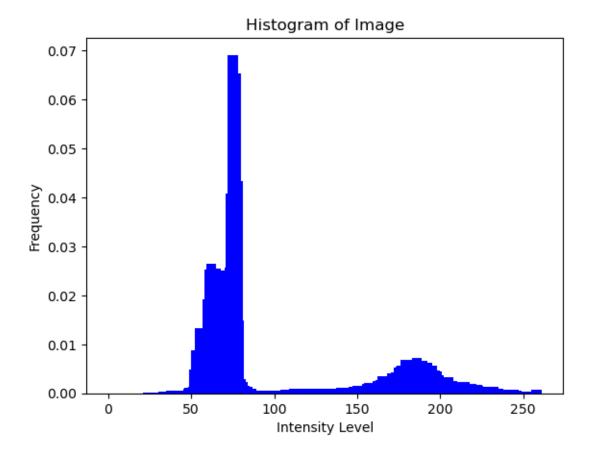
SUBMITTED BY Gaurav Talekar (21030) , Centre for atmospheric and oceanic science, HISTOGRAM COMPUTATION

Input Image: Given the Gray Scale Image of coins we need to compute the histogram.





Basically, we can see the peak of histogram having intensity in range between 50-100. Further we calculated the average intensity value, and it was found that it was 103.30500 and it matched with the actual intensity value.



This the normalized histogram which is obtained by dividing the histogram with total pixels.

OTUS'S BINARIZATION

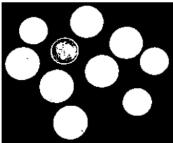
Original Image



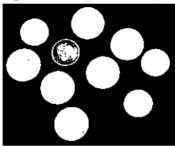
Original Image



Binarized Image between class variance (Otsu's Method)



Binarized Image within class variance (Otsu's Method)



The Time taken for between class variance is: 0.0102351 seconds.

The Time taken for within Class variance is: 0.04404 seconds.

Threshold (Between Class Variance): 125

Threshold (Within Class Variance): 125

Both the methods are giving the same result.

DEPTH BASED EXTRACTION



CONNECTED COMPONENT ANALYSIS

THE TOTAL NUMBER OF CHARACTERS EXCLUDING PUNCTUATIONS IS 60