

An implementation of the  
binary image thresholding  
algorithm.



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# INTRODUCTION

Actually, image thresholding is a simple form of image segmentation. It is **a way to create a binary image from a grayscale or full-color image**

- ❖ This is typically done in order to separate "object" or foreground pixels from background pixels to aid in image processing.

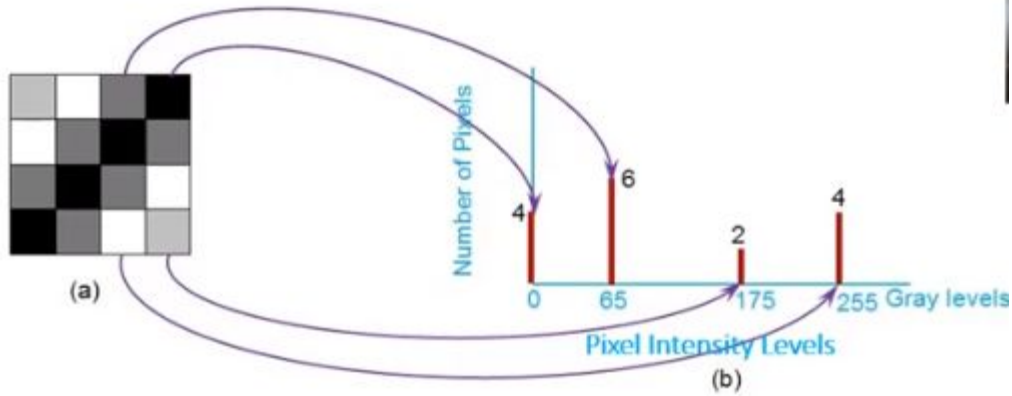
# SOFTWARES USED

**VS Code** :- i used VS Code because it is a EduA free IDE for learning and teaching programming with Python

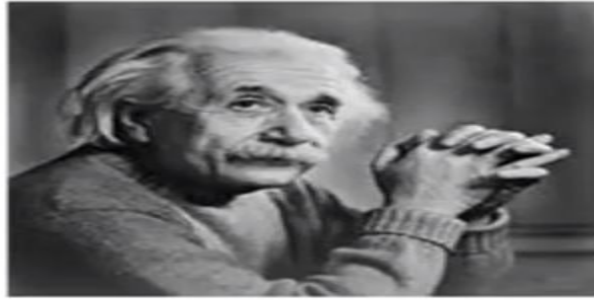
# Histogram

- ❖ Histogram:- Histogram is a graph of distribution data.
- ❖ Image Histogram :- Basically it's a graphical representation of tonal distribution in a digital image.

# Data plotted



- ❖ Perform histogram analysis on this image .



Grey Image



Number of pixel intensities = 256



0

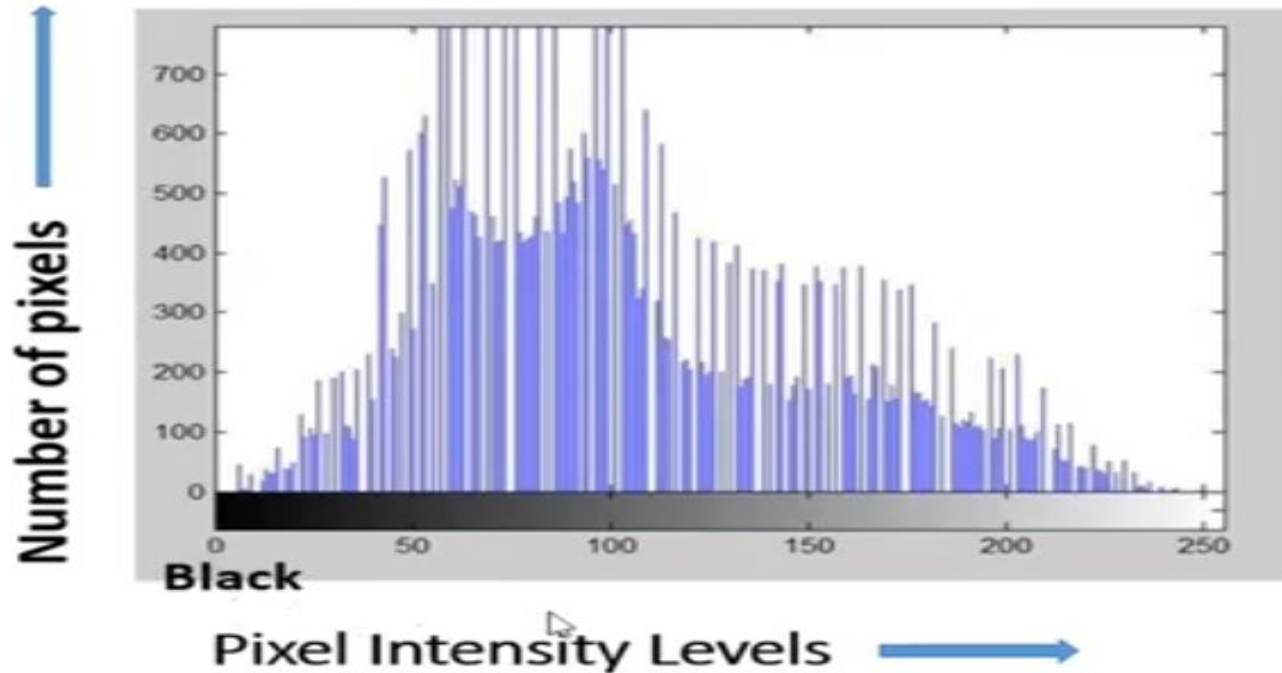
255



**Black**

**White**

# Histogram graph

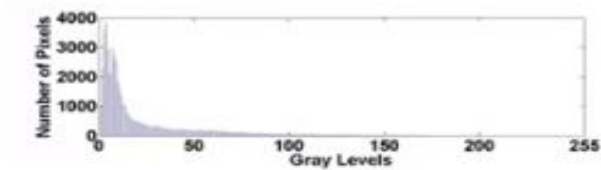




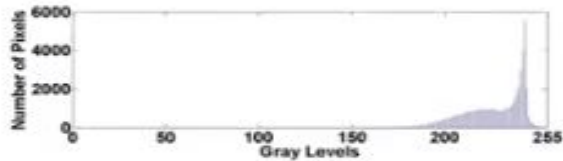
# Thresholding

- ❖ Thresholding plays a very important role in segmentation this makes a difference between object & background of image .
- ❖ Thresholding can be defined as:-
  01. Single level thresholding
  02. Multi level thresholding

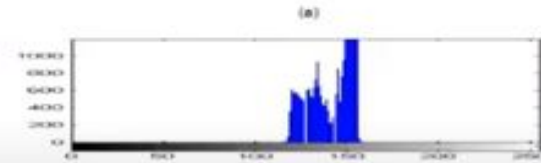
## ❖ Now different type of images



More Black Pixels



More White Pixels

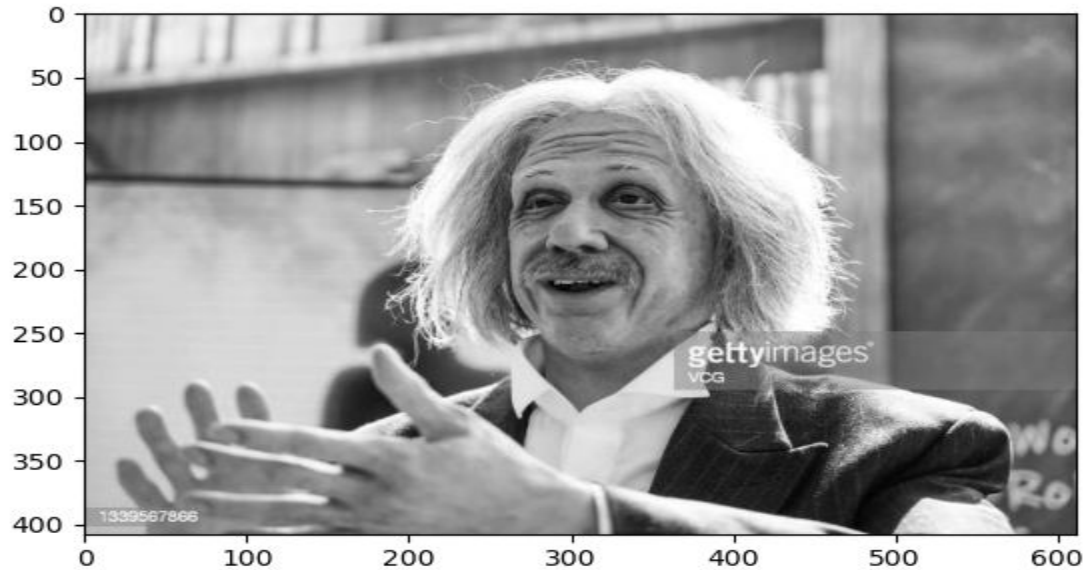


Dull Image

❖ Let's perform thresholding on below image:-



- Show the grayscale image:



- ❖ Show the thresholding image :-



## Source Code:

<https://github.com/sakirhussain51/Binary-thresholding/edit/main/README.md>

THANK YOU