

Computer Vision Hw #2

B06902058 吳崇維

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Homework Description

- (a) a binary image (threshold at 128)
 - (b) a histogram
 - (c) connected components(regions with + at centroid, bounding box)
-

- **Binary Image**

Simple if-else (The same as Hw1)

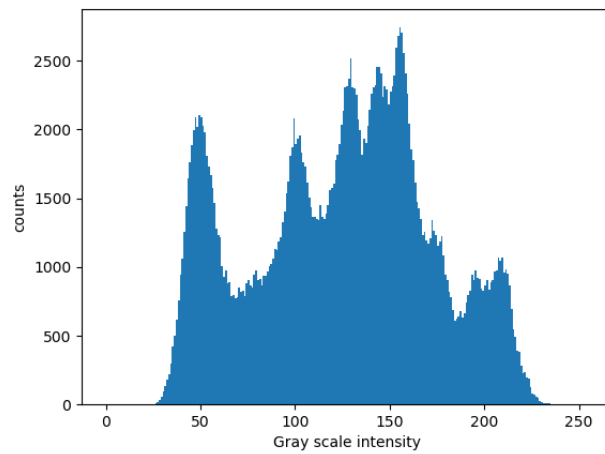
```
for i in range(length):  
    for j in range(length):  
        arr[i][j] = 0 if arr[i][j] < 128 else 255
```



- **Histogram**

Use : matplotlib

```
cnt = []  
for i in range(length):  
    for j in range(length):  
        cnt.append(arr[i][j])  
plt.hist(np.array(cnt), bins=range(256))
```



- **Connected components**

使用4-connect， 並且使用**bfs**來找出連通分量，以連通分量中的最大最小x, y值來畫box，以平均座標畫原點

其中圖片連通白色pixel

因code 較長，請直接參考source code.

