

# Assignment - 2

## 1. Binary Image Processing

- a. Thresholding
- b. Blob Coloring
- c. Region Analysis

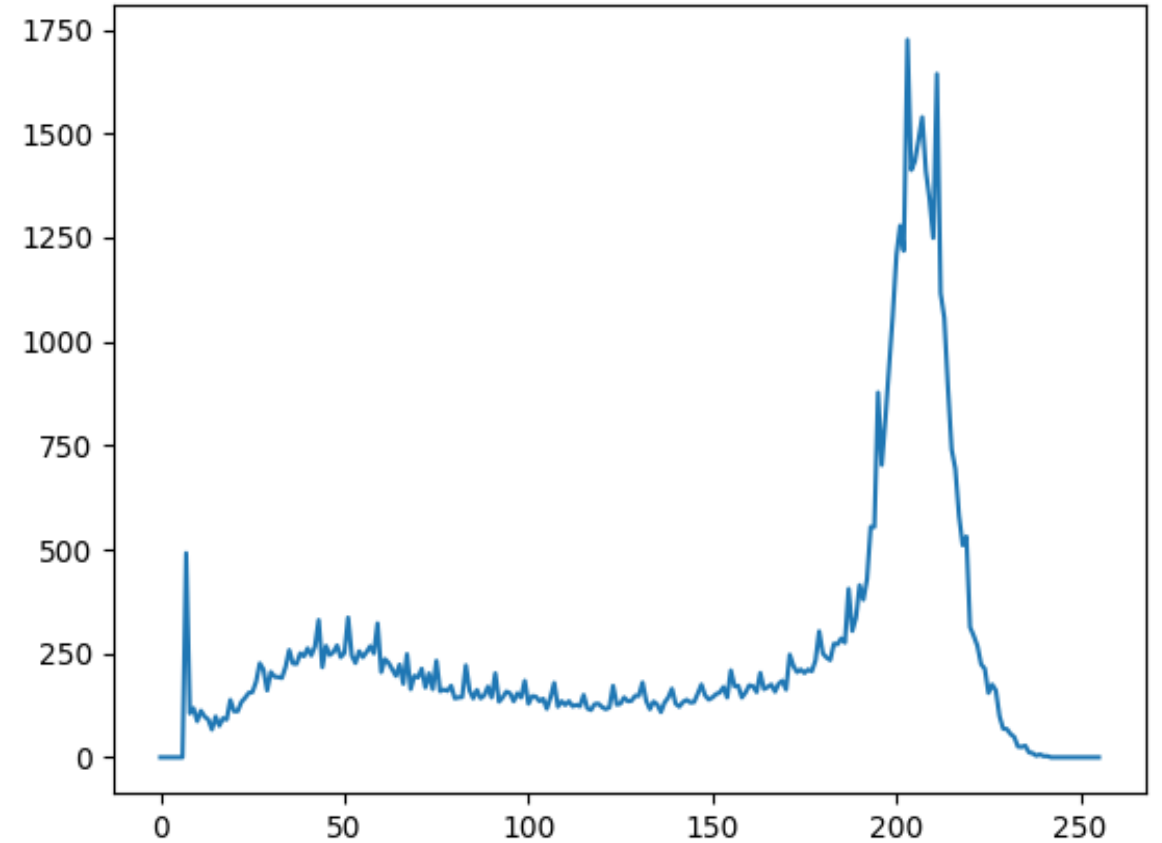
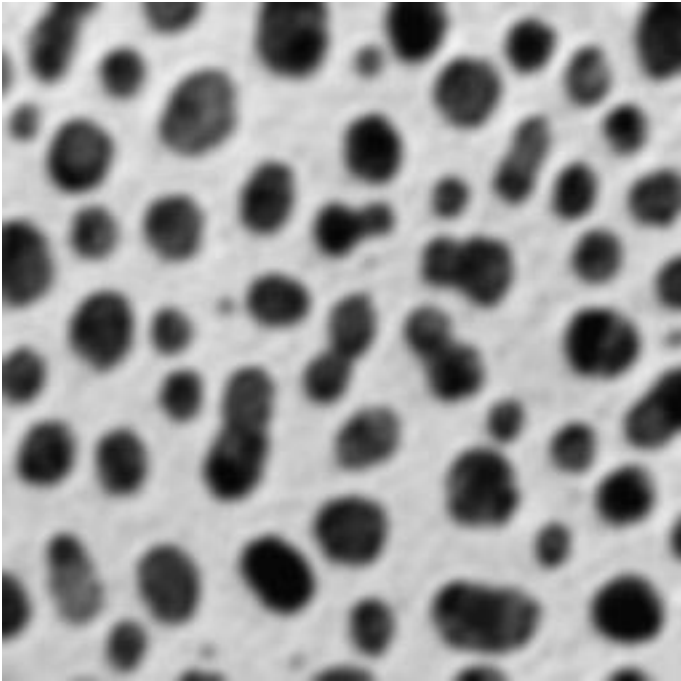
## 2. Compression

- a. Run-length encoding
- b. Decoding

**Due Date: Oct. 17<sup>th</sup>**

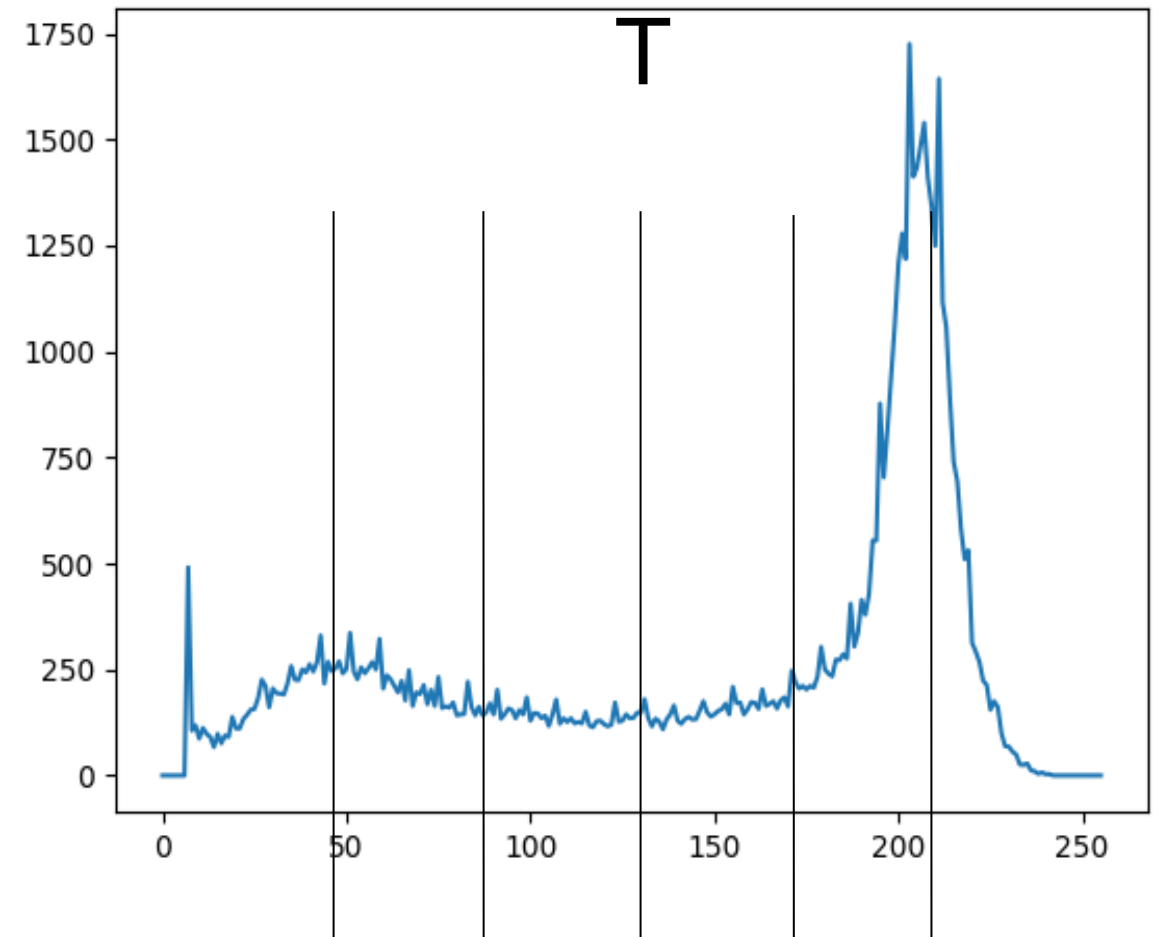
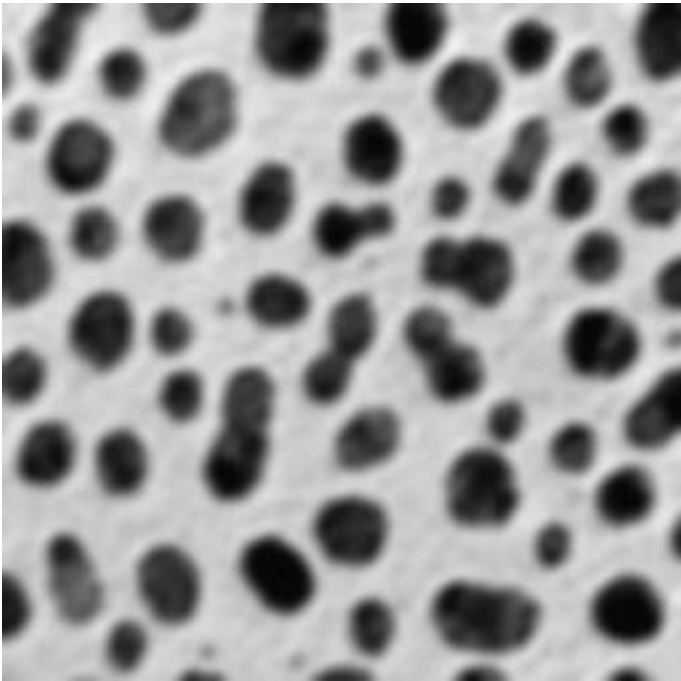
# 1. Binary Image Processing

- a. Thresholding
  - Compute Histogram



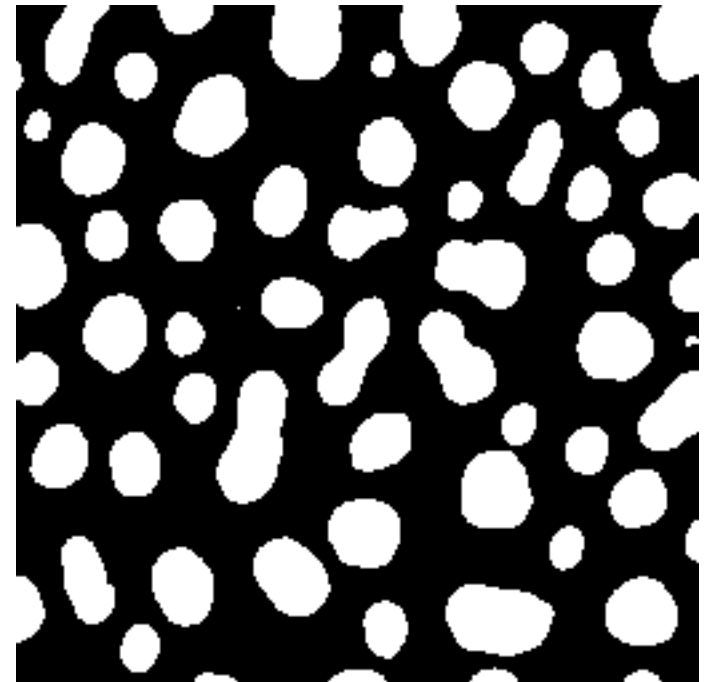
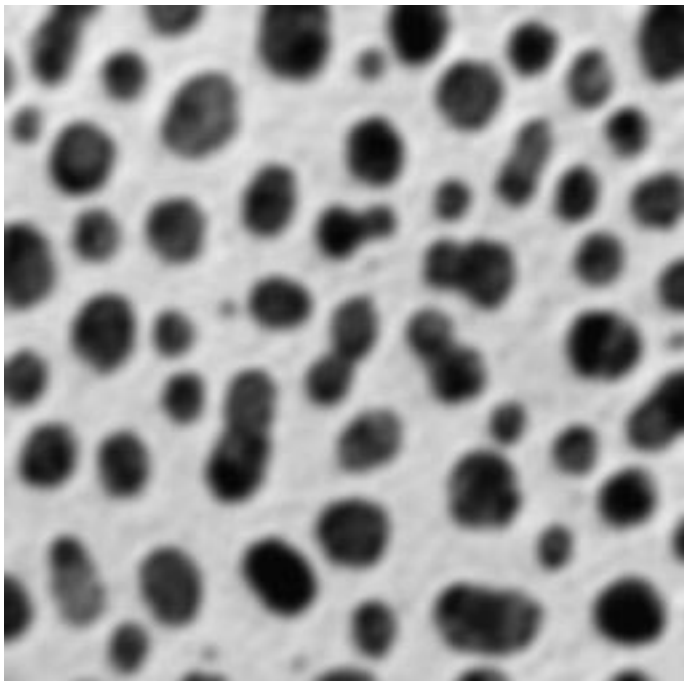
# 1. Binary Image Processing

- a. Thresholding
  - Compute Histogram
  - Optimal Threshold (Otsu's Thresholding)



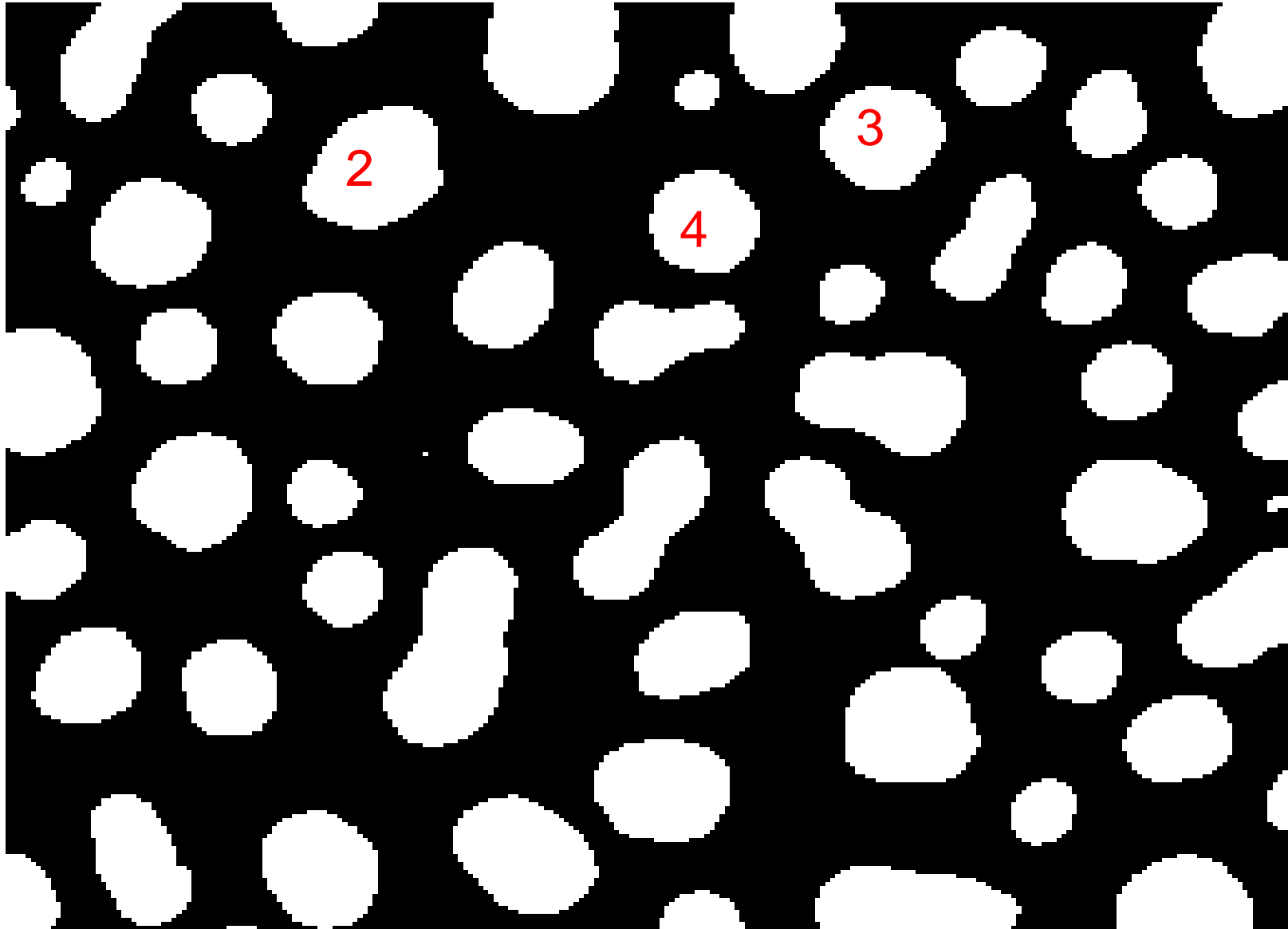
# 1. Binary Image Processing

- a. Thresholding
  - Compute Histogram
  - Optimal Threshold
  - Create Binary Image (Thresholding)



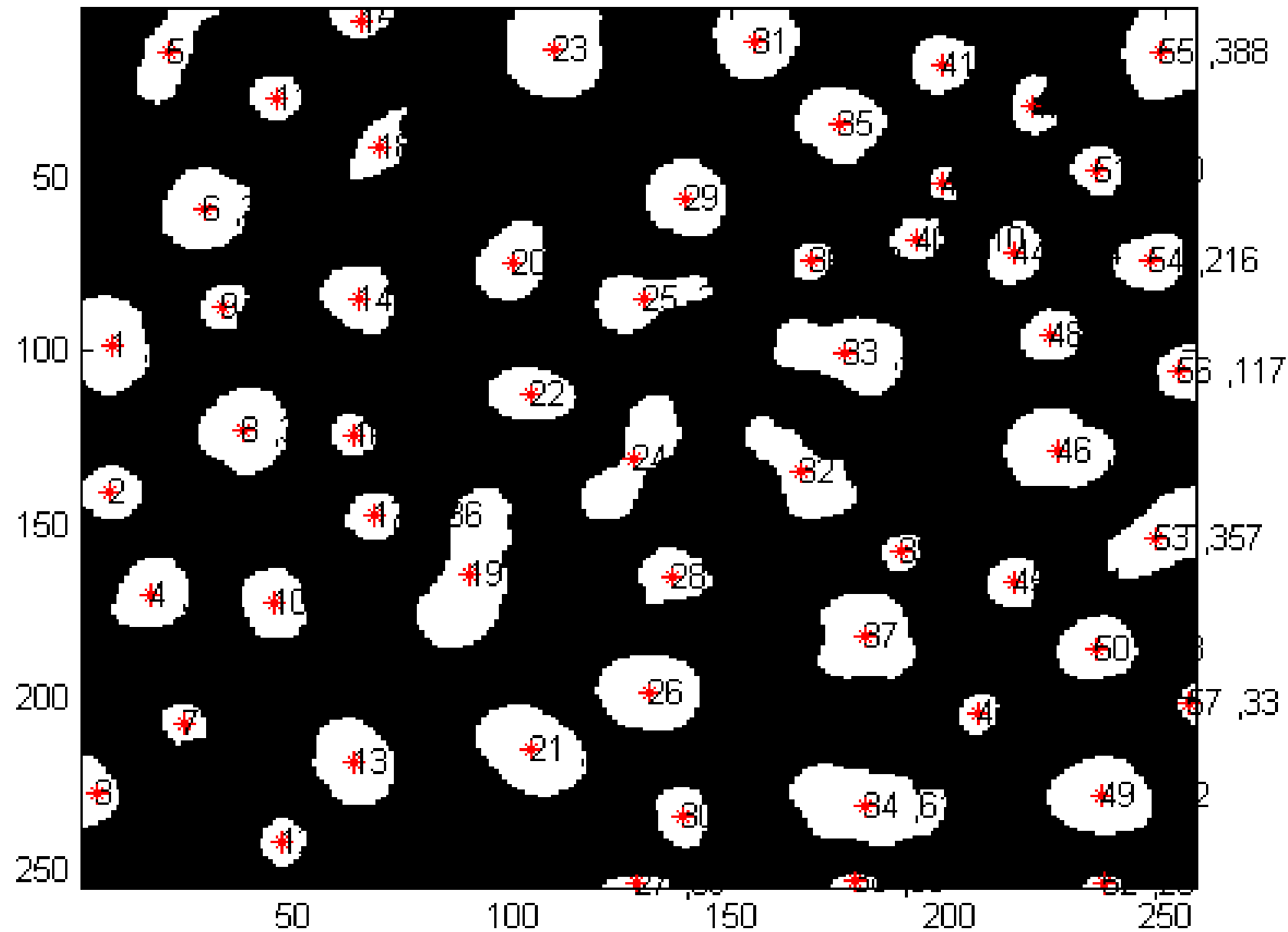
# 1. Binary Image Processing

- b. Blob Coloring

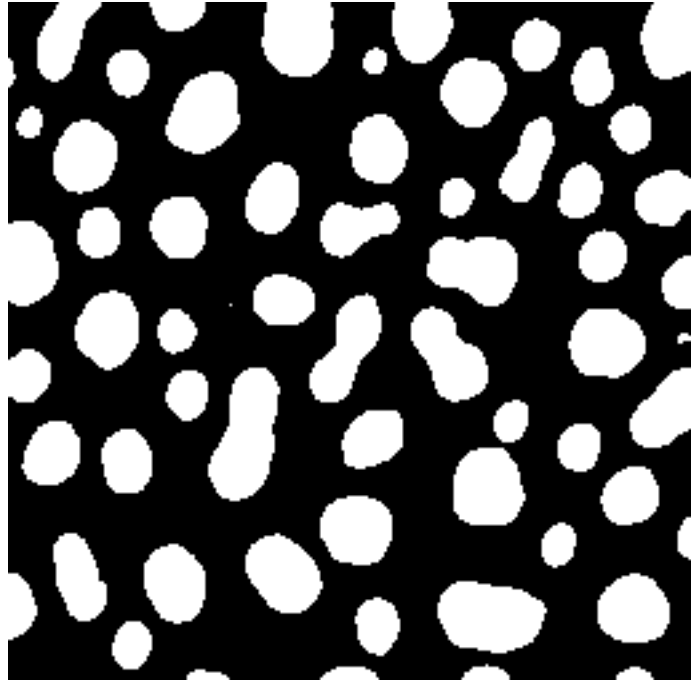


# 1. Binary Image Processing

- c. Region Analysis

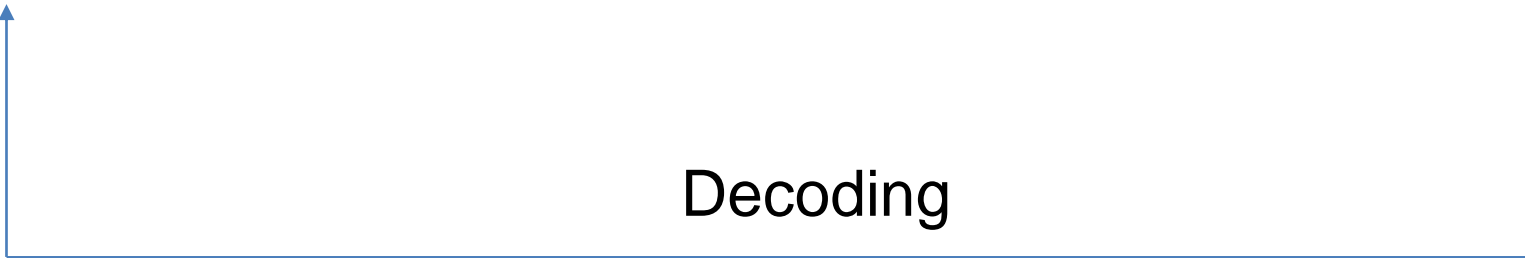


## 2. Compression



Run Length Encoding [1 10 100 ...]

Decoding



# Assignment -2

1. Binary Image Processing
  - a. Thresholding (15 Pts.)
  - b. Blob Coloring (40 Pts.)
  - c. Region Analysis (15 Pts.)
2. Compression (30 Pts)
  - a. Run-length encoding
  - b. Decoding

**Total: 100 Pts.**



# Submission Instructions

- Must use the **starter code** available in **Github**
- Submission allowed only through **Github**
- You will receive an email with invitation to join **Github** classroom
- Start by reading the **readme.md** file.  
Instructions are available here
- Github will **automatically** save the **last commit** as a **submission** before the deadline