University of the Punjab

Gujranwala Campus

Department of Information Technology

Computer Vision

Assignment

Submitted by:

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Submitted to:

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IMAGE SEGMENTATION TASK:

```
% Read the input image from file
I = imread('sun.jpg');
% Display the original input image
figure('Name', 'Original Image');
imshow(I); % Show the image
title('Original Image');
% Analyze the histogram of the image
figure('Name', 'Histogram');
imhist(I); % Display the histogram of the image
title('Image Histogram');
% Compute the optimal threshold level using Otsu's method
level = graythresh(I);
% Convert the grayscale image to a binary image using the threshold
BW = im2bw(I, level);
% Display the binary (black and white) image after thresholding
figure('Name', 'Enhanced Image');
imshow(BW);  % Show the output image
title('Output Image'); % Set title for the output image
```

RESULTS:

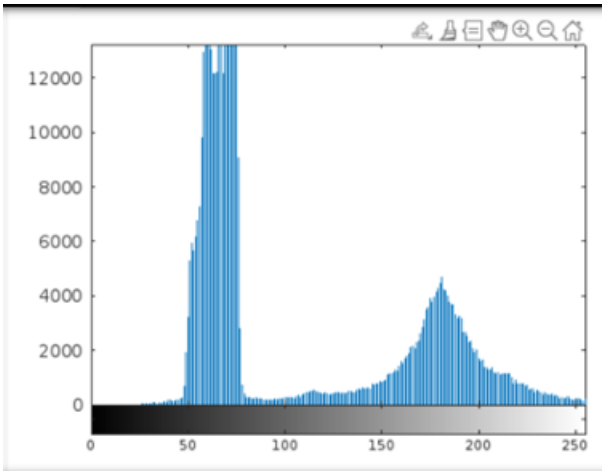

Figure # 1

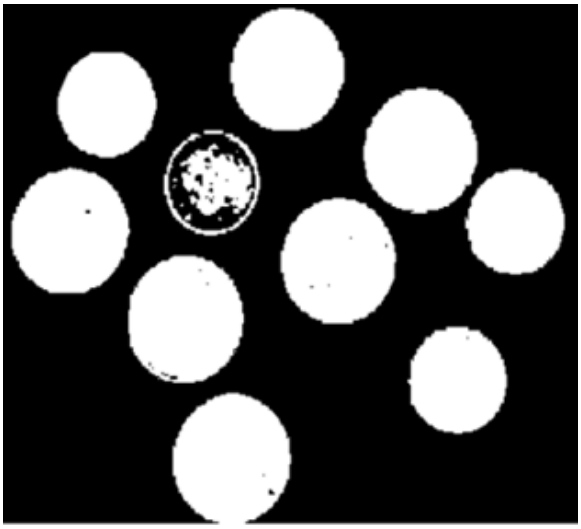

Figure # 2