**Image segementation 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

**MatLab ScreenShots**



