

```

% Loading the image from the path and converting it to grayscale
img = imread('C:\Users\USER\Desktop\Assignment Image.JPG');
gray_img = rgb2gray(img); % Converting the image to grayscale

% Quantizing the grayscale image to 32 levels
quantized_img = floor(double(gray_img) / 8) * 8; % Reducing the number of
grayscale levels to 32
quantized_img = uint8(quantized_img); % Converting the image back to uint8 format

% Displaying the original and quantized images side by side
figure;
subplot(1, 2, 1), imshow(gray_img), title('Original Grayscale Image');
subplot(1, 2, 2), imshow(quantized_img), title('Quantized to 32 Grayscale Levels');

```

