

```

img = imread('/MATLAB Drive/1.jpeg');
grayImg = rgb2gray(img);
%Normalize the grayscale image to the range [0, 1]
normalizedImg = double(grayImg) / 255;
% Quantize to 32 grayscale levels using imresize
quantizedImg = imresize(normalizedImg, [32 32], 'nearest');
quantizedImg = imresize(quantizedImg, size(grayImg), 'nearest');

%Round the intensity values and scale back to 0-255 range
quantizedImg = round(quantizedImg * 31);
quantizedImg = uint8(quantizedImg * (255 / 31));

%Display the original and quantized images
subplot(1, 2, 1);
imshow(grayImg);
title('Original Image');

subplot(1, 2, 2);
imshow(quantizedImg);
title('Image Quantized');

```

**Original Image**



**Image Quantized**

