

```

img = imread('/MATLAB Drive/1.jpeg');
if size(img, 3) == 3
    img = rgb2gray(img);
end
% quantization factor
quantization_factor = 8;
%Quantize the image using imresize
image_quantiz = imresize(floor(double(img) / quantization_factor),size(img));
image_quantiz = image_quantiz * quantization_factor; % Scale back to
0-255range
%Display the original and quantized images
figure;
subplot(1, 2, 1), imshow(img), title('Original Grayscale Image');
subplot(1, 2, 2), imshow(image_quantiz, []), title('Quantized Image (32
Levels)');

```

Original Grayscale Image



Quantized Image (32 Levels)

