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% Step 1: Loading the Image
img = imread('dip.jpg');
grayImg = rgb2gray(img);

% Step 2: Scaling Down the Intensity Levels
scaledDown = imresize(grayImg, [size(grayImg, 1), size(grayImg, 2)] / 8);

quantized = round(scaledDown) * 8;

% Step 3: Displaying the Original and Quantized Images
figure;
subplot(1, 2, 1), imshow(img), title('Original Image');
subplot(1, 2, 2), imshow(quantized), title('Quantized to 32 Levels');
```

**Original Image**



**Quantized to 32 Levels**

