```matlab
% Read the Image
img = imread("C:\Users\Pavan\Desktop\cat.2.jpg");


% Convert to grayscale if the image is RGB
if size(img, 3) == 3
    img_gray = rgb2gray(img);
else
    img_gray = img;
end

% Normalize the Image (values between 0 and 1)
img_normalized = double(img_gray) / 255;

img_resized = imresize(img_normalized, 1/32, 'nearest');

img_quantized = imresize(img_resized, size(img_normalized), 'nearest');

img_quantized_32_levels = round(img_quantized * 31) * (255 / 31);

% Display the Original and Quantized Images
figure;
subplot(1, 2, 1), imshow(img_gray), title('Original Grayscale Image');
subplot(1, 2, 2), imshow(uint8(img_quantized_32_levels)), title('Quantized to 32 Grayscale Levels');
```
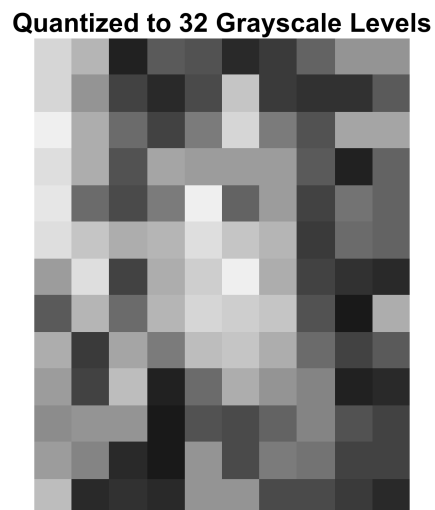
Original Grayscale Image   Quantized to 32 Grayscale Levels

Read the picture: Imread is used to load the picture.

Convert to Grayscale: The rgb2gray program is used to convert an RGB picture to grayscale.

Normalize the Image: The grayscale image's pixel values are adjusted to range from 0 to 1.

Reduce Image Size: The original size of the image has been reduced to 1/32.

Return to Original Dimensions: The smaller image is adjusted to return to its original size.

Quantize using 32 Levels of Grayscale: The values of the pixels are rounded to thirty-two levels.

Display photos: For comparison, the original and quantized photos are displayed side by side.