

```
clc;clear

%Read the Image
img = imread('lenna.gif');

% Number of bits/pixel
k = 1;

intensity_level = 2^k ;
target_compr_factor = 256 / intensity_level;
img_reduced1 =floor((double(img)/256)*intensity_level);
img_reduced = uint8(img_reduced1 * target_compr_factor);

% Display the original and reduced images side by side
montage({img_reduced,img})
```

