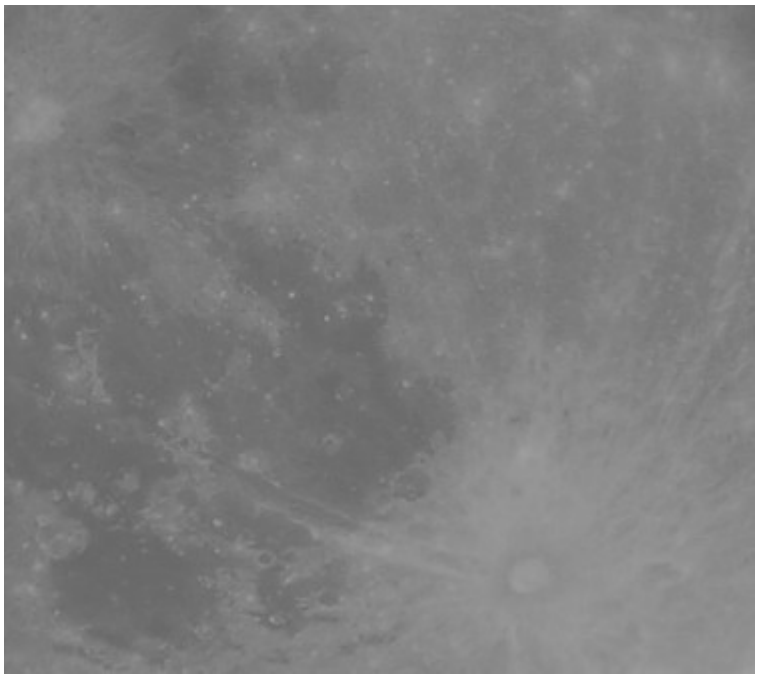
3. Read a grayscale image and perform the gamma correction method on it to enhance the image. Analyze the result by varying gamma value.

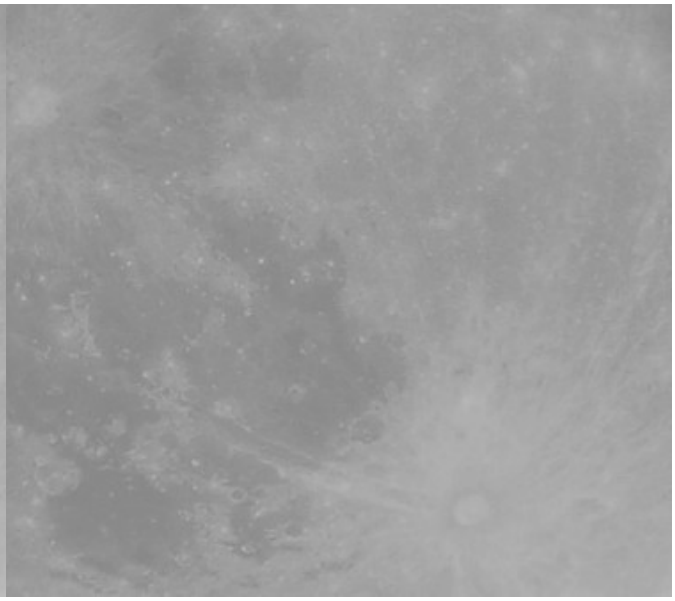
Input Image:



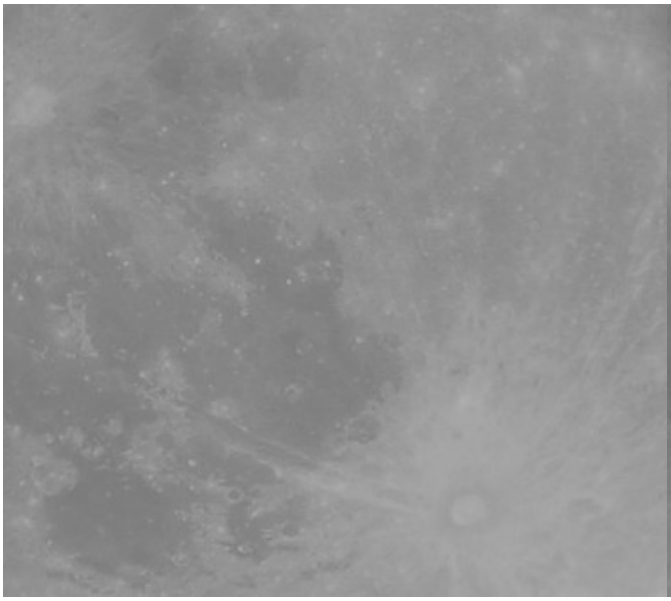
Output Images:

0.1 0.5

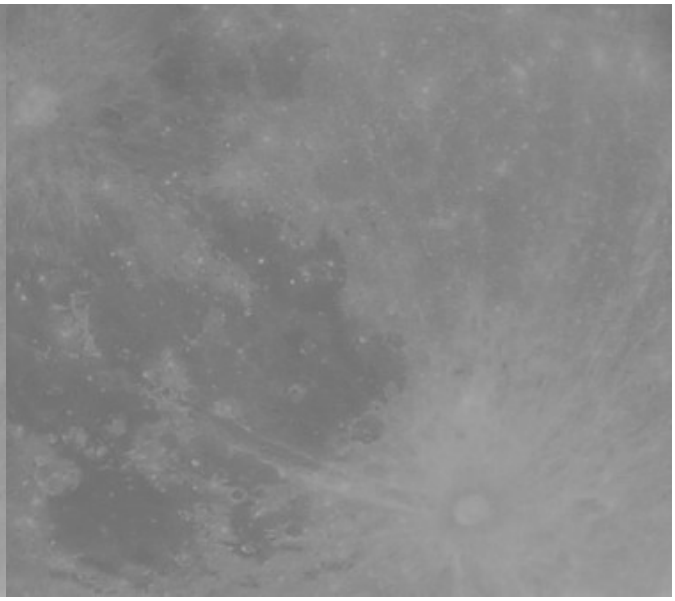
0.6



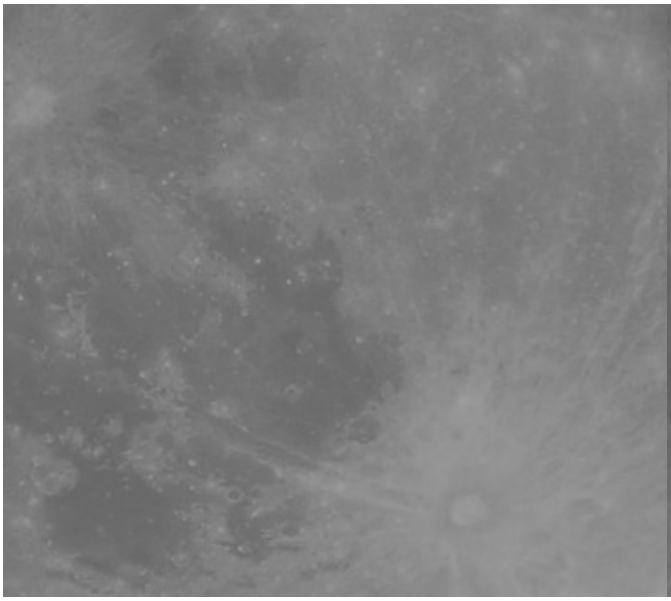
0.7



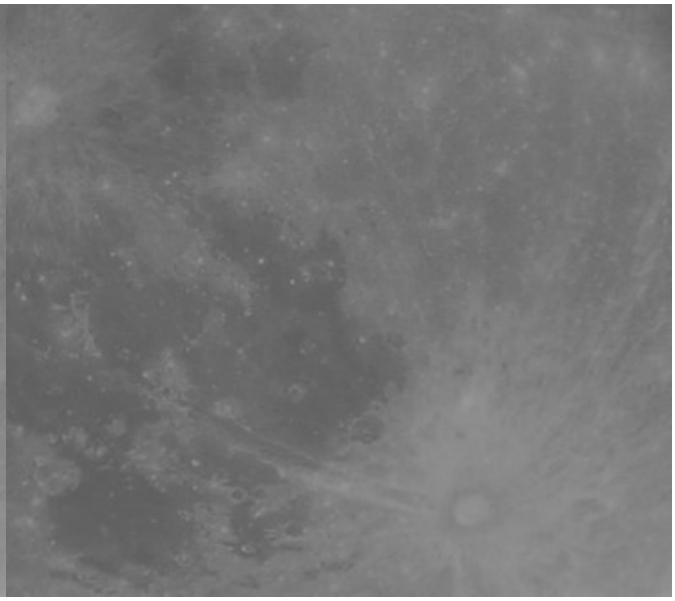
0.8



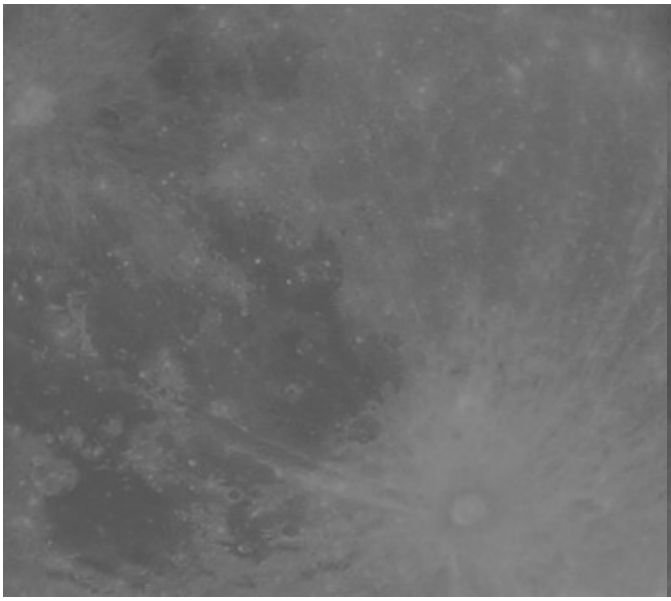
0.9



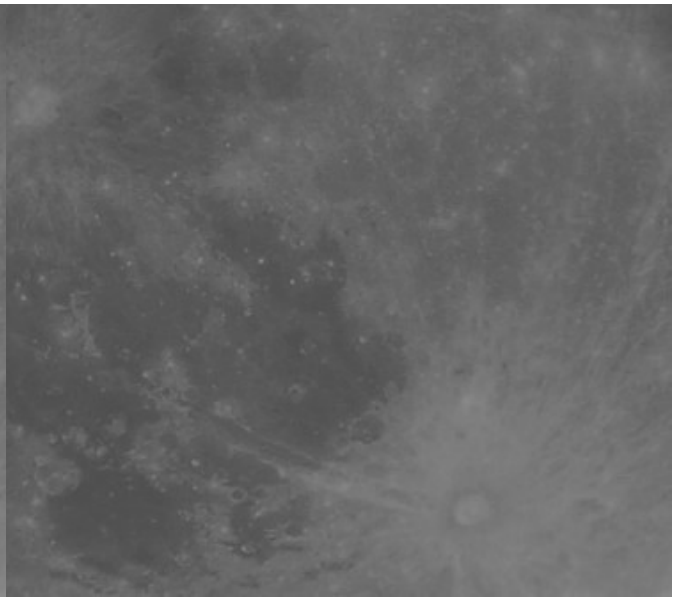
1.0



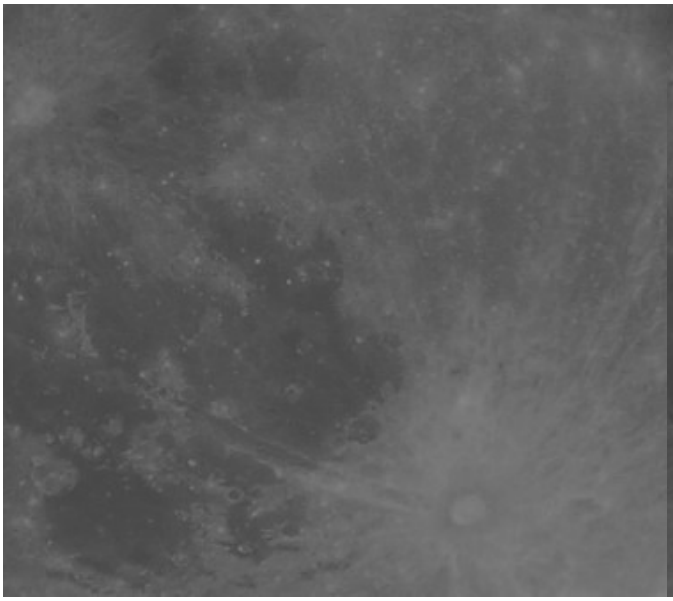
1.1



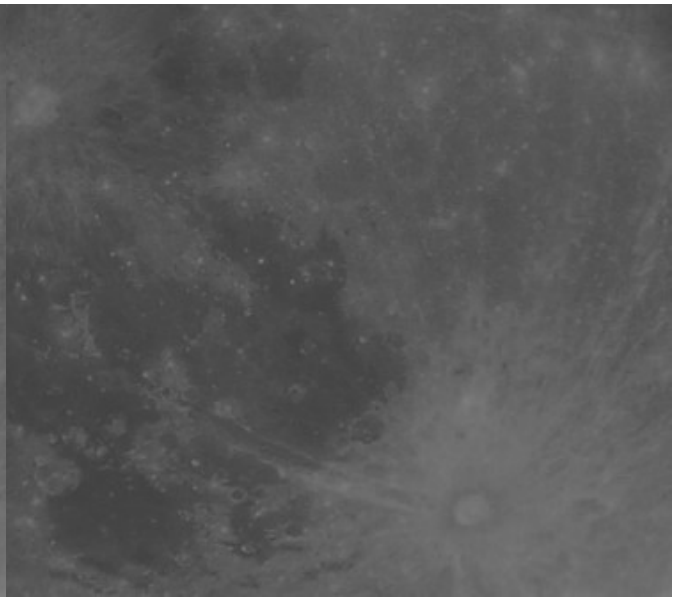
1.2



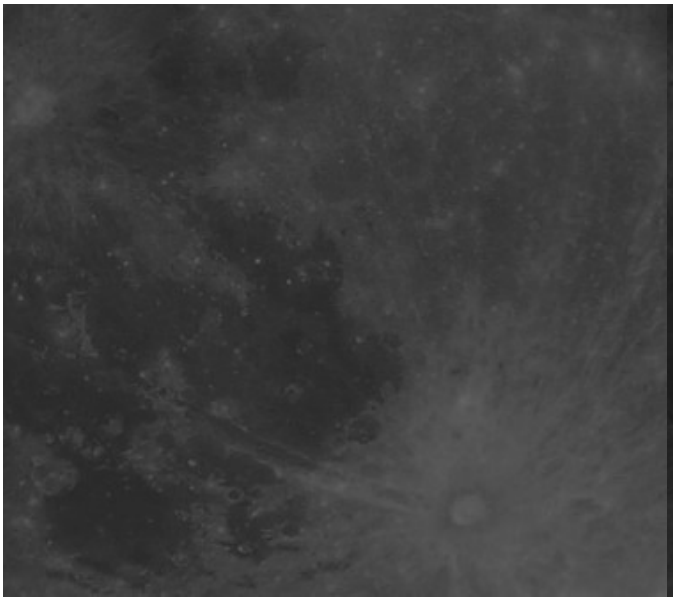
1.3



1.4



1.5



2.0

2.5

3.0

3.5

4.0

4.5

Conclusion:

If we choose a higher gamma value, the output image looks too dark and if we choose a low gamma value, the output image looks too white. The contrast of the image is just right when we perform a gamma correction with a gamma value of 1.5 on the original image. Thus we can conclude that, for the given image, a gamma value of 1.5 produces an image with the right contrast.