Lab3: Image Filtering in Frequency Domain using OpenCV

Ex1. Apply the Gaussian High pass filter to the image "pout.jpg" with different Do.
Use the code in samples 2 and 3.
Also modify the code in 3 to generate a Gaussian Low Pass Filter (GLPF) and apply this low pass filter to the image "pout.jpg", compare the results of GLPF with results of Ideal Low Pass Filter. Which is better and why?

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Ex2. Given the image "noisy3.tif" and "noisy1.tif", you're required to enhance the image details as much as you can by removing the repeating pattern.
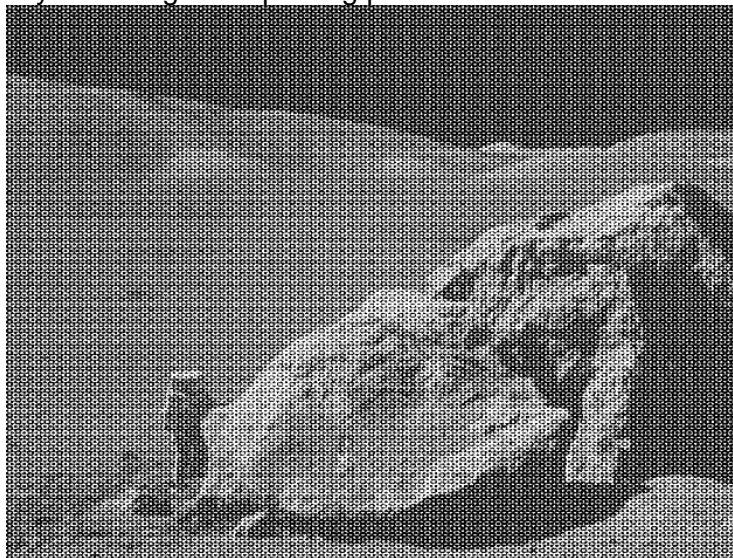
Ex3. Given the Image "noisy2.tif", you're required to remove the noise as much as you can and enhance object details (the moon in the center of the image).
You can use spatial filtering techniques in Lab1.
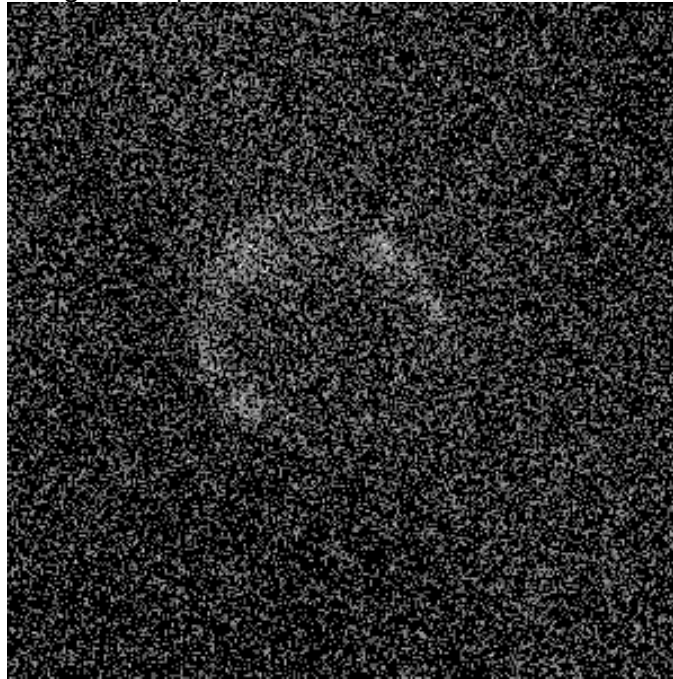
Ex4. Given the 4 images "a1.jpg, a2.jpg, b1.jpg, b2.jpg", use Fourier transform to detect whether the image is captured in the morning or in the evening.
Note that it's acceptable to customize your solution for each sequence {a1, a2} and {b1, b2}

a1.jpg

a2.jpg