

1.Remove the noise from the input images Q_1_1, 1_1_2 , Q_1_3 , and Q_1_4. Submit your code and the output images.

2.Restore the original images from the inputs Q_2_1, Q_2_2 and Q_2_3.

3. (1)What is the advantage of converting an image from spatial domain to frequency domain? Explain properties of 2-D Fourier transform.

(2)What is the effect of size and shape of the mask on the filtering process?

4.Use Highpass filtering and threshold for image enhancement.The input image is Q_3.

(1):Return highpass filtering of the input image using BHPF(order 4 with a cutoff frequency 50).

(2): Return the result of thresholding (1). Submit your code and output image. The reference results are as follows:



A. Input image



B: result of highpass filtering A



C: Result of thresholding B