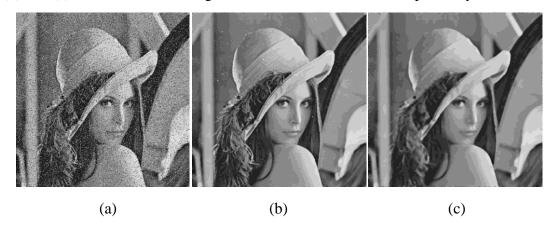
程式作業 (5)

模擬 (1), (2), (3) 的 Smoothing 方式,使用自己的人頭照,執行後印出結果以比較各種 Smoothing 效果。

- (1) Smoothing by spatial lowpass filter with a mask of size 3×3, 5×5, 7×7, 9×9, 21×21, respectively. (模擬 教材- Practice-7 之 Figure 4)
- (2) Noise reduction by median filter: (a) image corrupted by impulse noise of noise-ratio 30%; (b) and (c) are results of filtering with a 3*3 mask and a 5*5, respectively.



(3) Noise reduction by alpha-trimmed mean filter with 3*3 mask: (a) image corrupted by Gaussian noise with mean = 0 and variance = 400 and impulse noise with 5% salt-noise and 5% pepper-noise; (b) the filtered result of (a) by T=1; (c) the filtered result of (a) by T=2; (d) the filtered result of (a) by T=4 (i.e., median filtering). (模擬 教材- Practice-7 之 Figure 8)