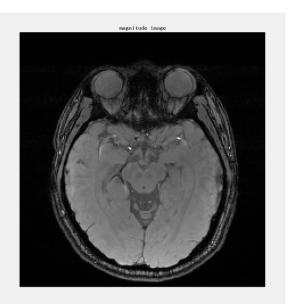
# Medical Imaging Homework 2 P76094282 方郁文

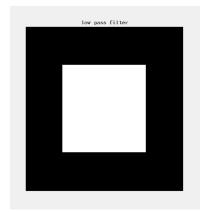
#### Part 1



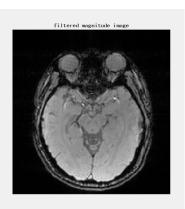


## Part 2

### 2.1

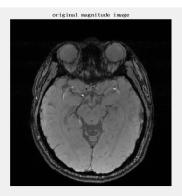


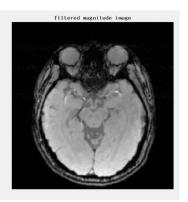




#### 2.2

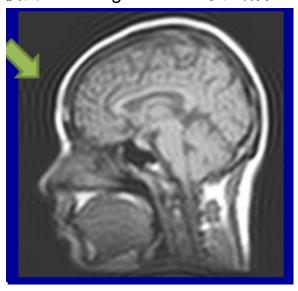




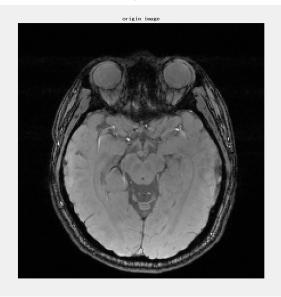


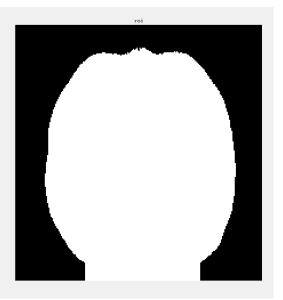
#### 2.3

Low pass filter 對影像會產生模糊的效果,因為高頻的訊號為圖像邊緣。 對高頻進行濾波, 可達到消除 Noise 的效果(在part 3) 可以看出來。 使用Hamming Window 可以消除 ringing 的效果



Part 3 使用 thresholding 切出腦袋的 ROI





#### SNR

origin image	23.042852
low pass filter	24.909292
hamming	42.670568