

MIC Assignment-2

Aditya Neeraje (23B0940)
Chaitanyaa Maheshwari (23B0926)

February 13, 2026

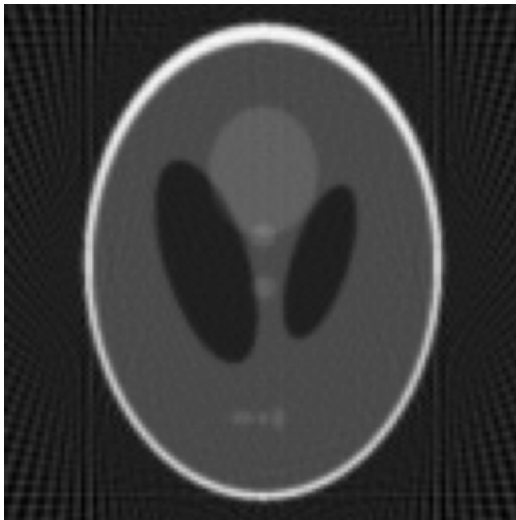
Contents

1	Question 2	1
2	Question 3	3

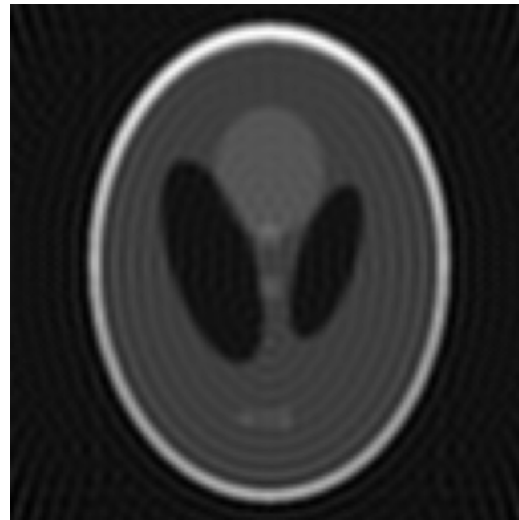
1 Question 2



No Filtering



Ram-Lak ($L = 0.5$)



Ram-Lak ($L = 0.25$)

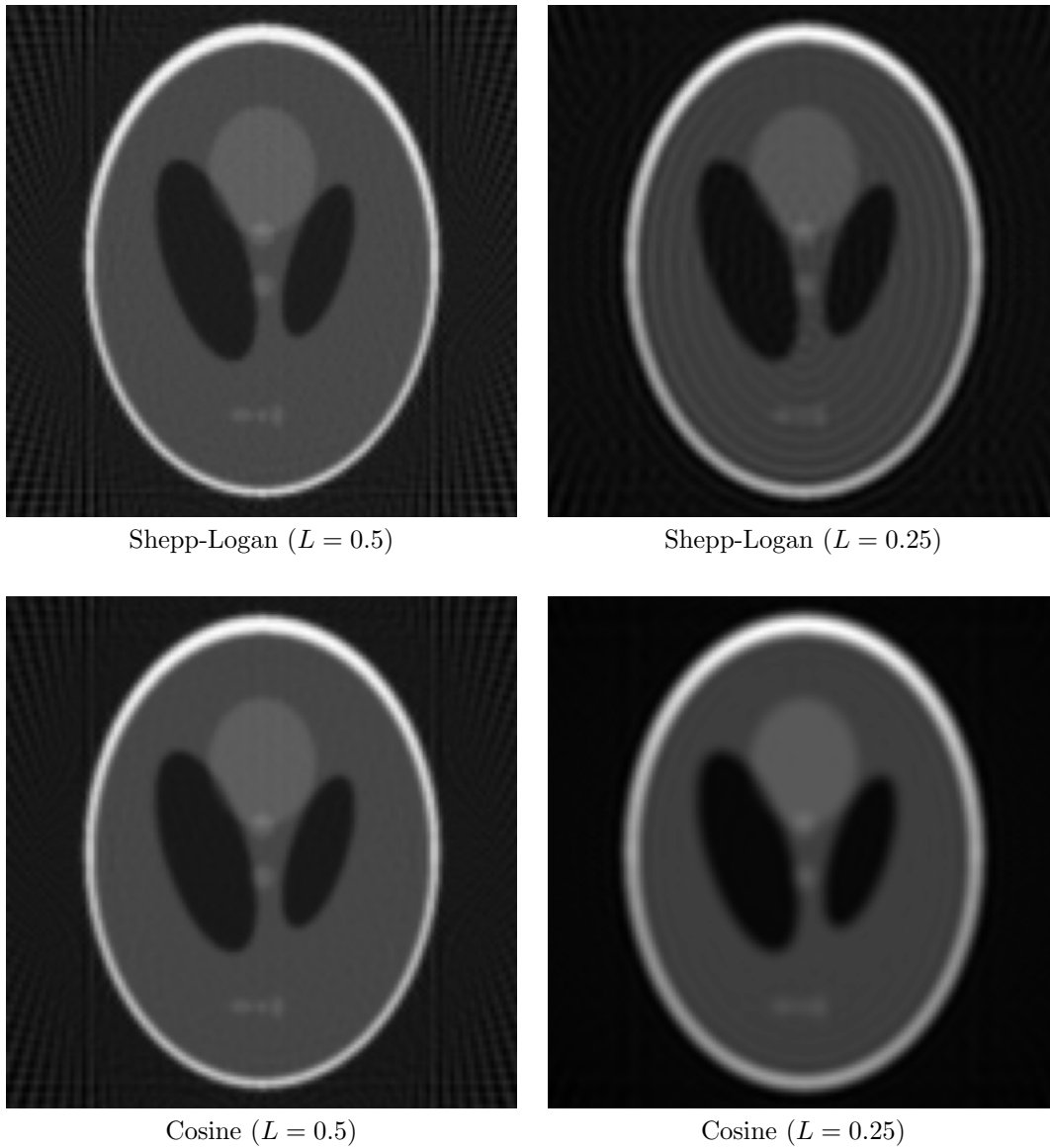


Figure 1: Comparison of reconstructed images using different filters and cutoff frequencies.

2 Question 3

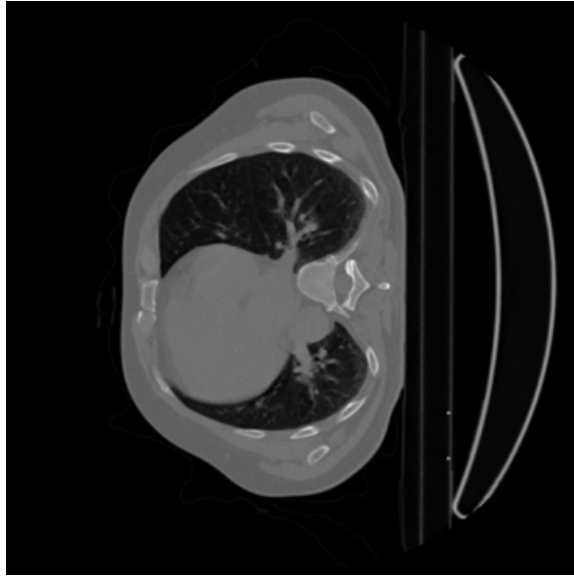


Figure 2: Original Image - Chest CT



Figure 3: Original Image - Phantom

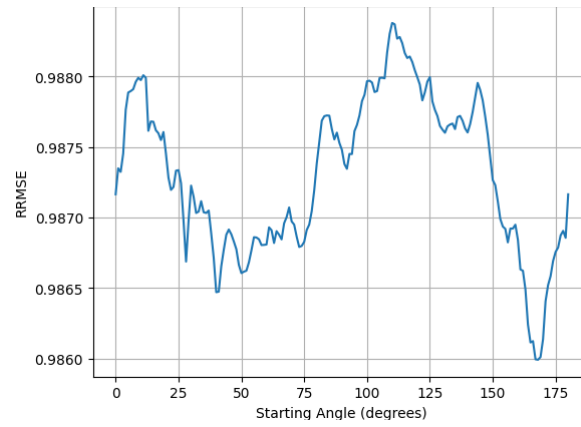


Figure 4: RRMSE Plot - Chest CT

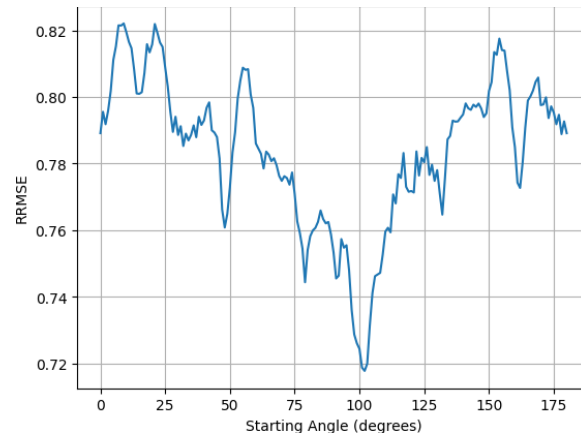


Figure 5: RRMSE Plot - Phantom

Minima of RRMSE for Chest CT is an RRMSE of 0.9859919140151212 at 168 degrees. For phantom, it is an RRMSE of 0.7176981638852817 at 102 degrees.

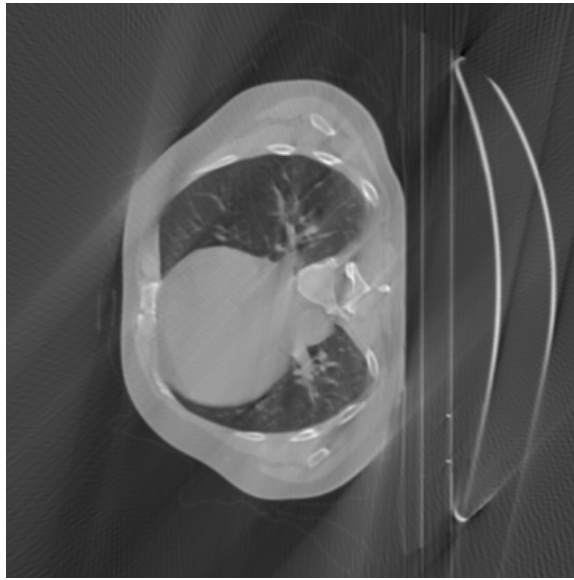


Figure 6: Optimal Reconstruction - Chest CT



Figure 7: Optimal Reconstruction - Phantom