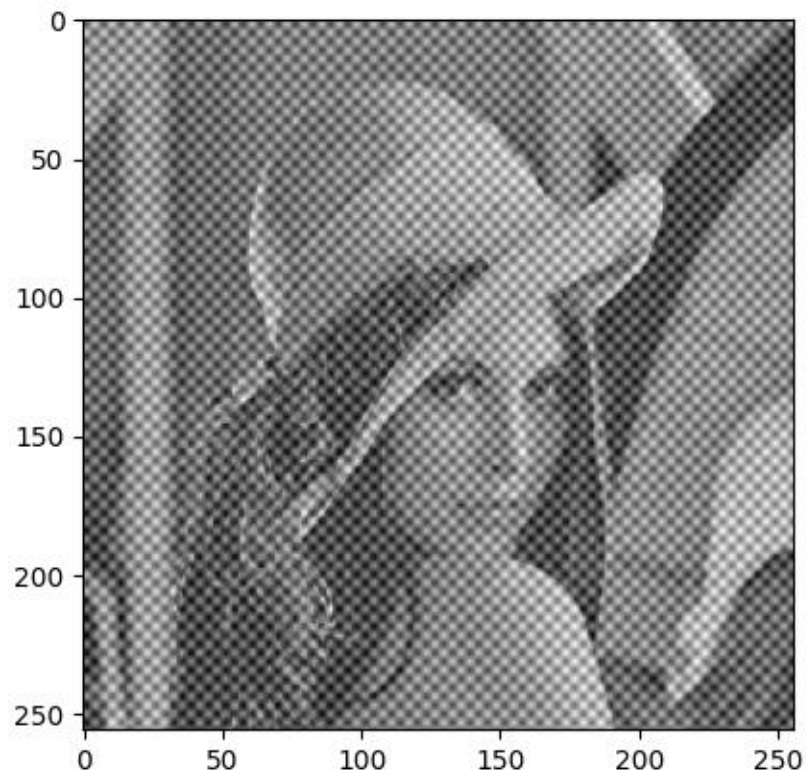
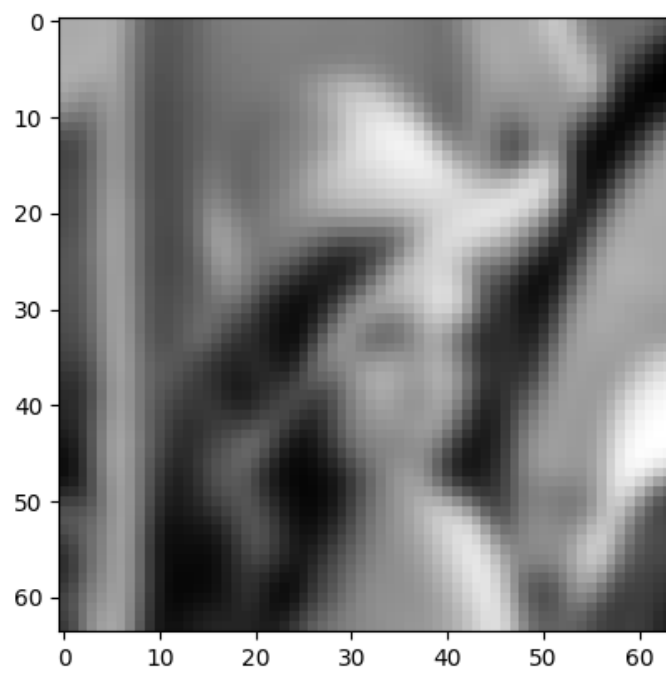
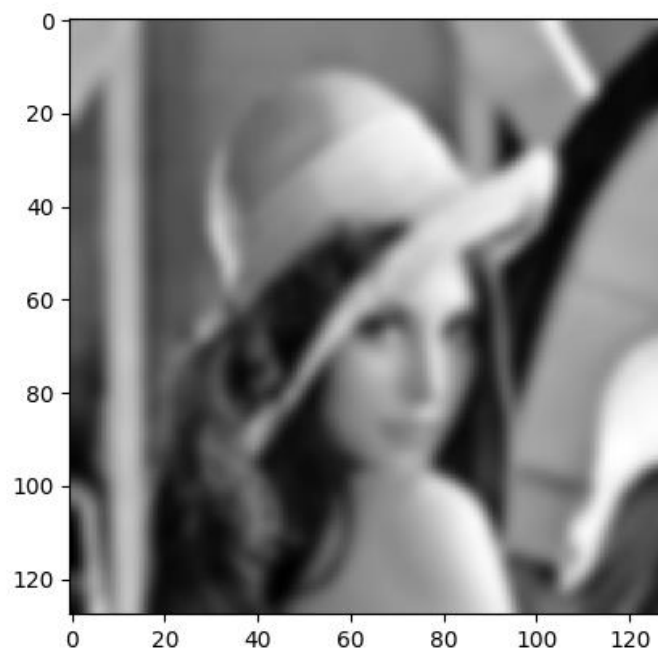


## ASSIGNMENT 2 REPORT

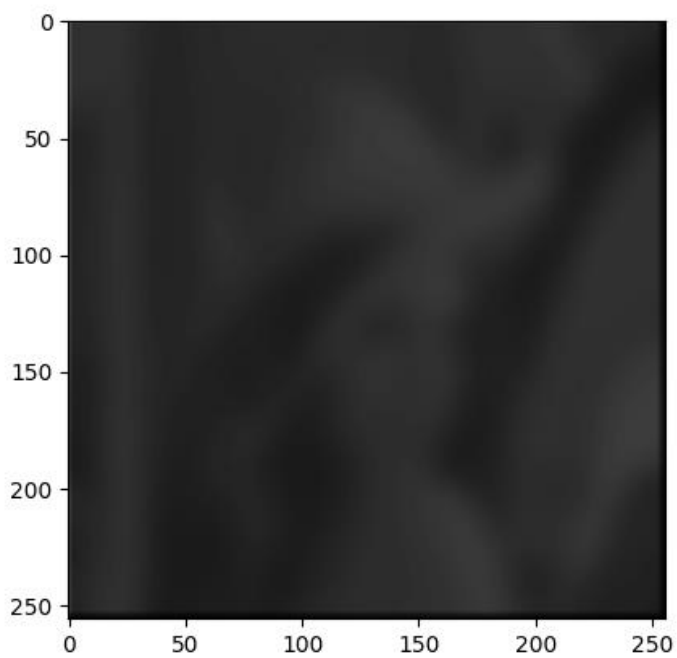
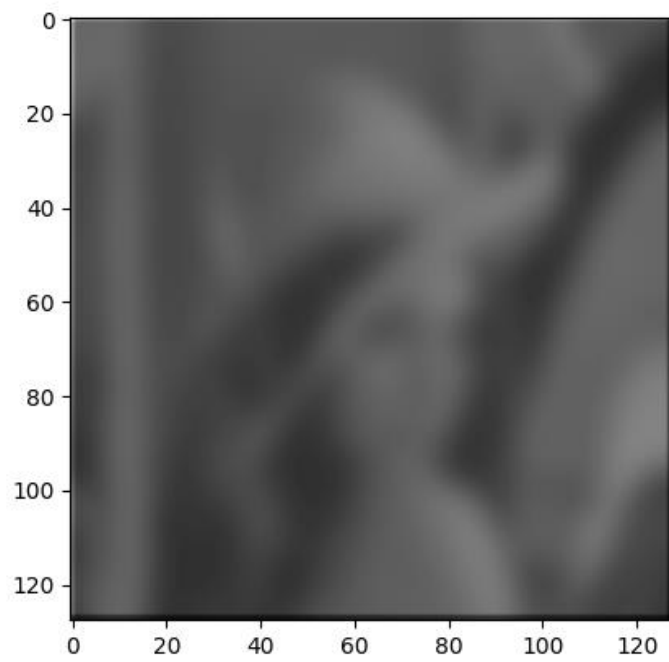
1)



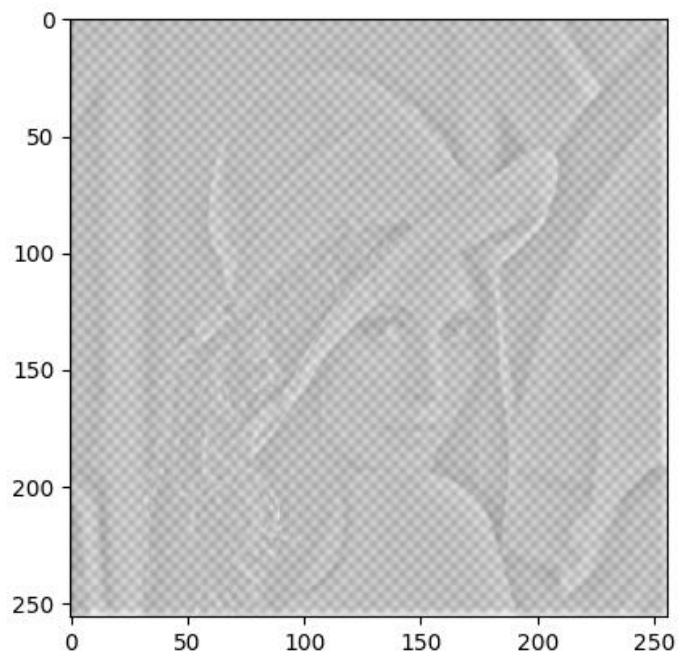
DOWNSAMPLING levels k-1 and k-2



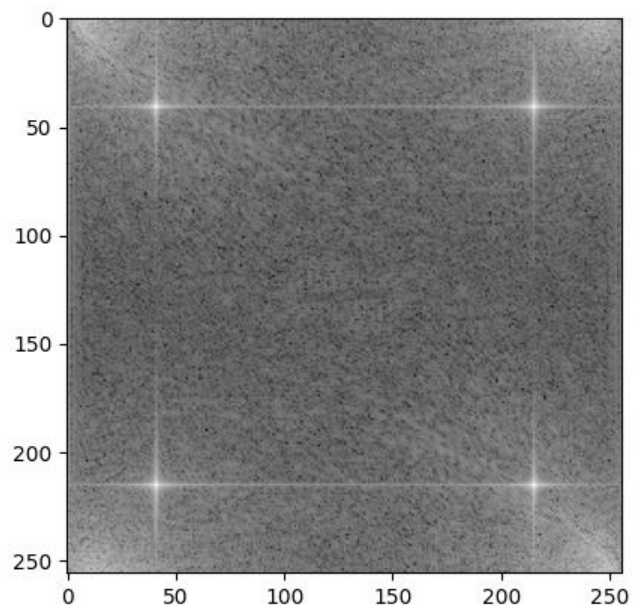
UPSAMPLING using linear interpolation



RESIDUAL IMAGE

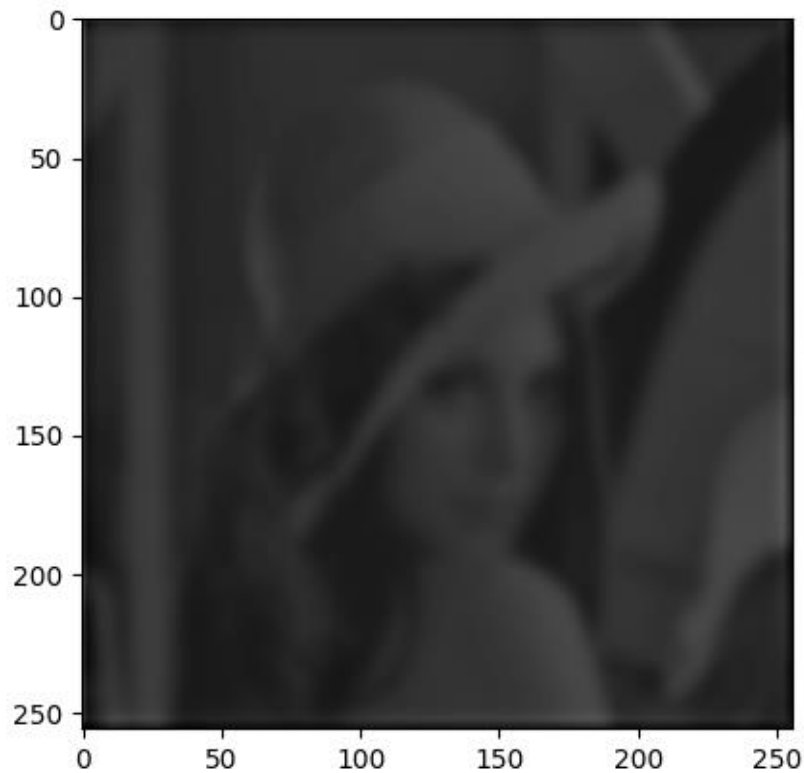


Frequency spectrum of the residual



Original Reconstruction by removing the high frequency components

Done by using Gaussian filter of size 3. Also tried with size 5 , which was too much loss of information



How did I reduce the impact of high frequency components?

The residual image contains the high frequency components. So applying the filter on the residual image removed the high freq components and adding that with the upsampled image lead to reduction in noise.