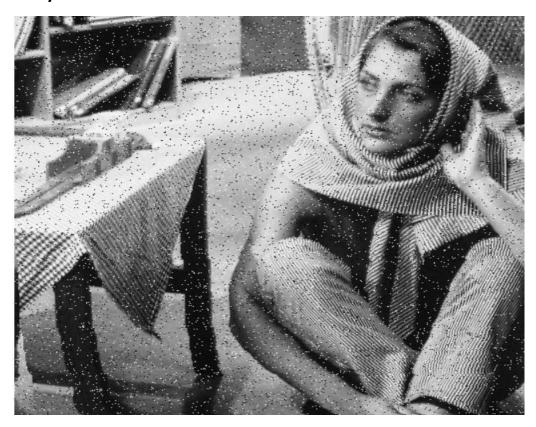
VAIBHAV RAJPAL 2020146

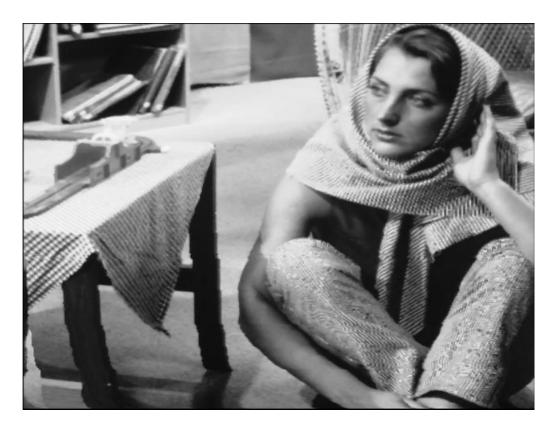
Ans 1:

3x3 Median Filter:

5% Corrupted:

Noisy:









20% Corrupted:





25% Corrupted:





PSNR:

5% Corrupted Pixels: 21.197008982771052

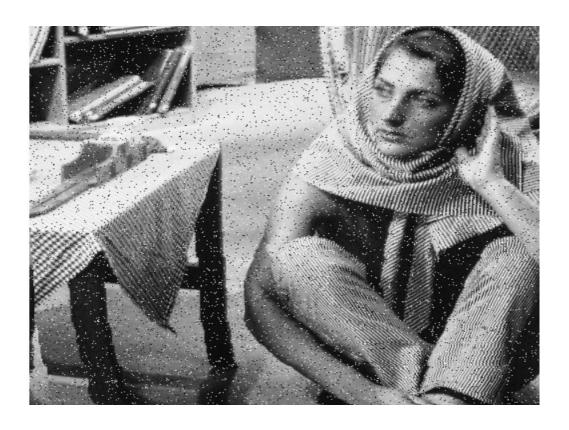
15% Corrupted Pixels: 20.698934859437223

20% Corrupted Pixels: 20.33193419207995

25% Corrupted Pixels: 19.96375517789337

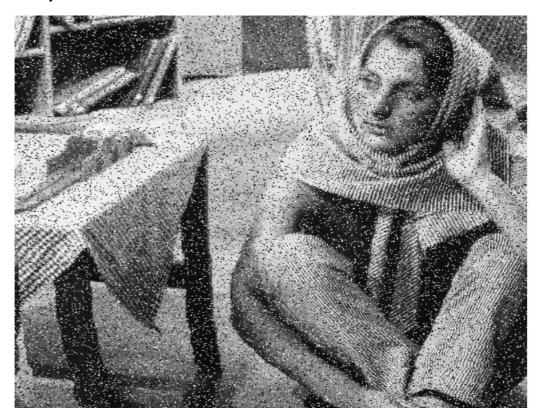
5X5 Median Filter:

5% Corrupted:





Noisy:





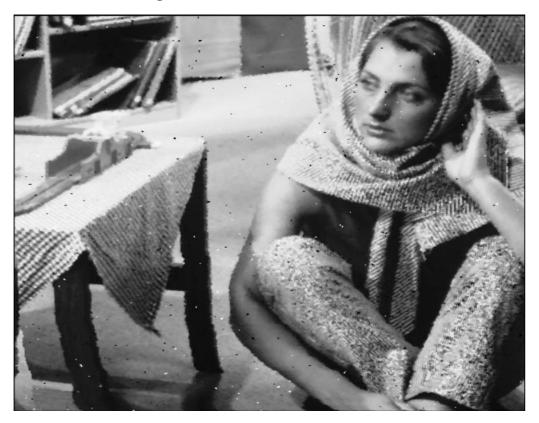
Noisy:







Best Denoised Image:



PSNR:

5% Corrupted Pixels: 18.76713194133925

15% Corrupted Pixels: 18.66212442014761

20% Corrupted Pixels: 18.597080143600138

25% Corrupted Pixels: 18.54478969273091

Now from the PSNR values for various corruption pixel values for various window size of 3x3 and 5x5, we can conclude that the window size of 3x3 is better.

Ans 2: Nearest Neighbour:



PSNR: 32.49076427109166

Bilinear:



PSNR: 25.087212669691255

Bell:



PSNR: 19.87524701427126

Hermite:



PSNR: 19.226351829251726

Bicubic:



PSNR: 32.1893852888092