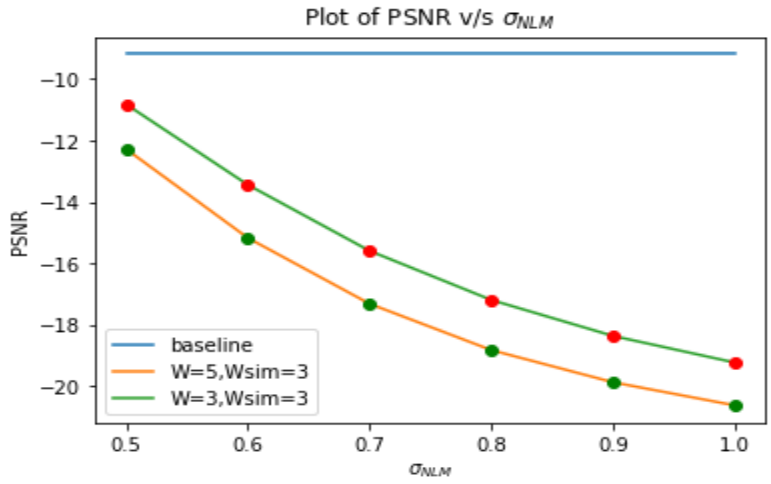
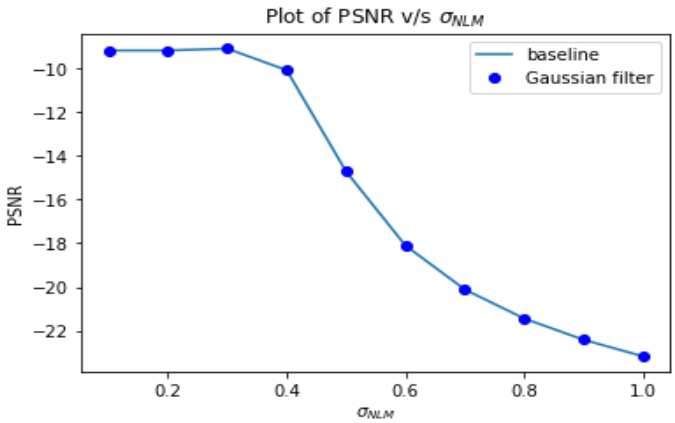
Kumari Rashmi Assignment 10 EE5175
EE20S051

Q1.

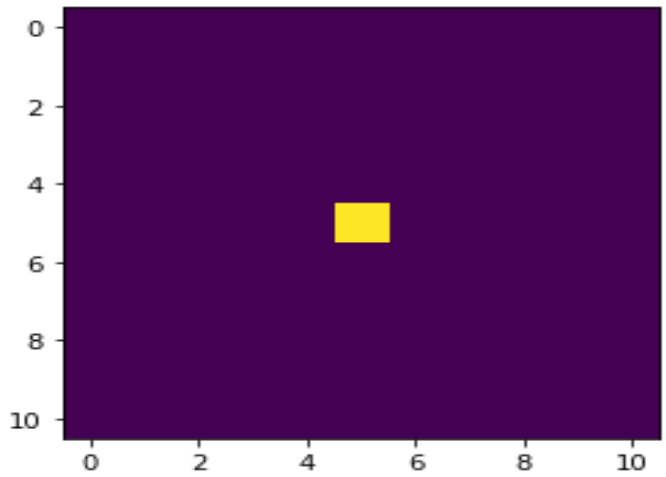


Q2.



Q3(a).

Wsim = 3; W = 5; sigNLM = 0.5 and pixel location 31,46



Q3(b). Wsim = 3; W = 5; sigNLM = 0.5 and pixel location 38,58

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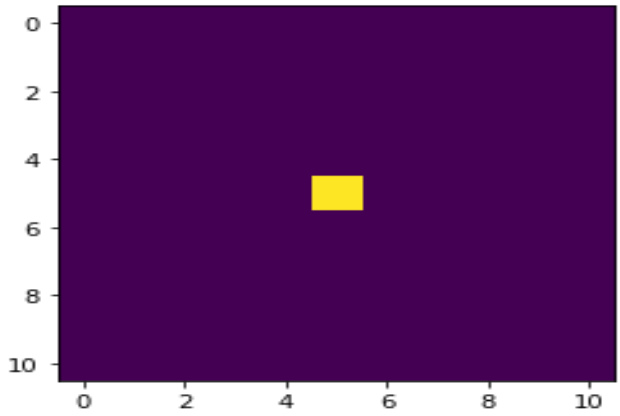
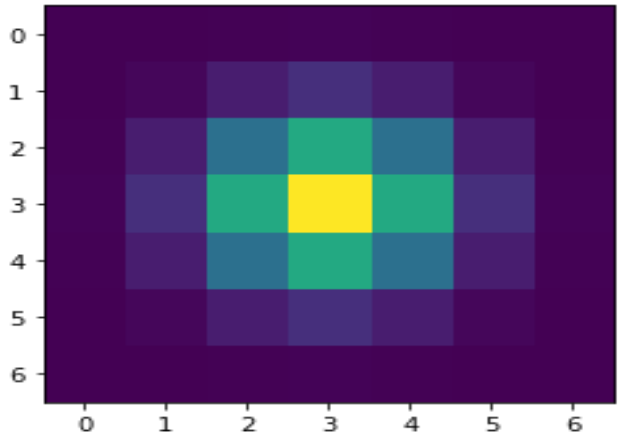
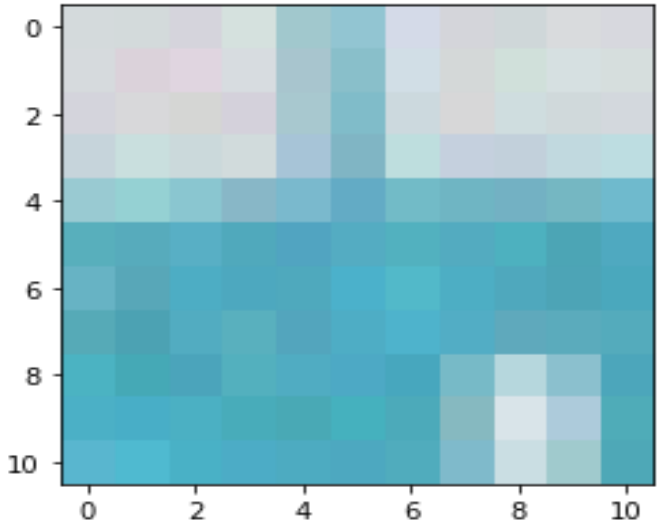


Q3(c). Gaussian filter: for sigma_g = 1.0



Q4(a).



Q4(b).

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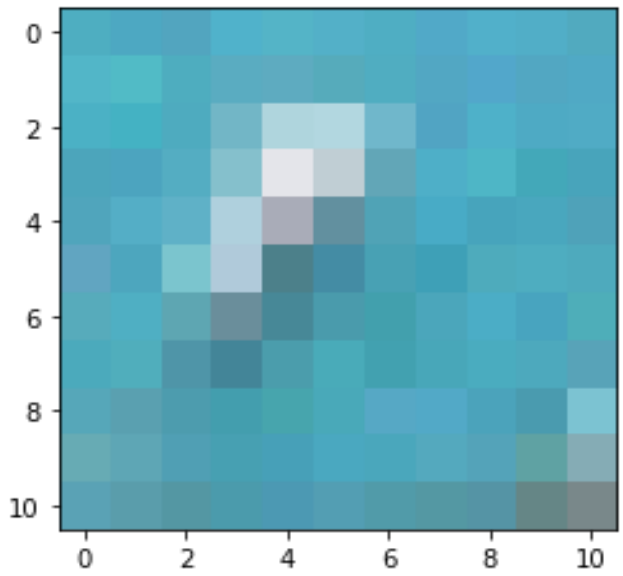
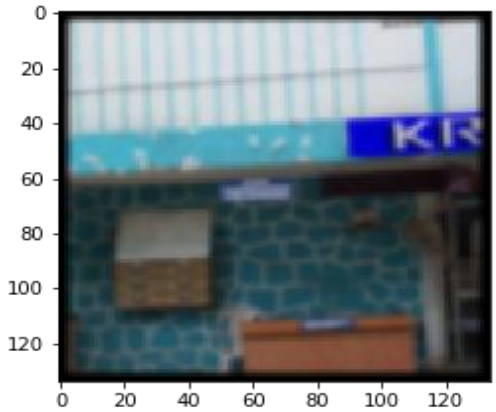
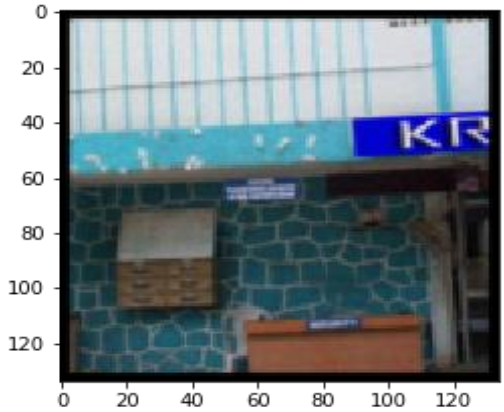


My Observation:

Denoised image by Gaussian filter with sigma value 1.0:



Denoised image by Gaussian filter with sigma value 0.5:



Denoised image by NLM filter Wsim = 3; W = 5; sigNLM = 0.5:

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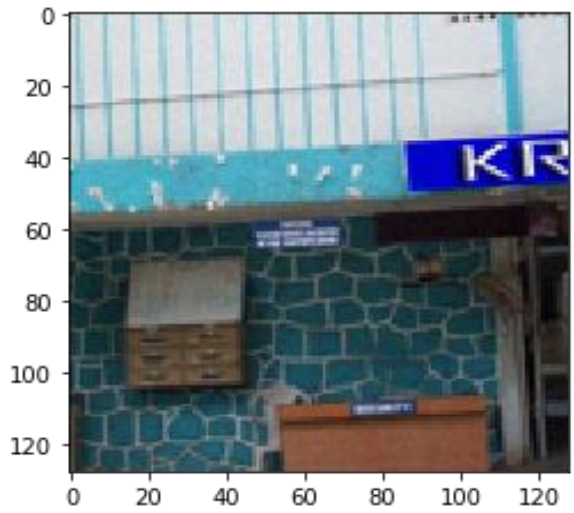

Conclusion: with NLM filter blurring is not happening, while Gaussian filter causes blurring when sigma value is getting increased.