

Language: Python3.8.3      Modules: OpenCV(cv2), numPy

- Gaussian noise, amplitude of 10



Gaussian noise,  
amplitude of 10  
SNR=13.382135095839438



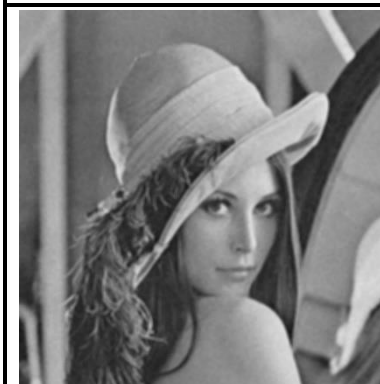
Box\_3x3  
SNR=17.746453448308813



Median\_3x3  
SNR=17.62826360593196



Opening-then-closing  
SNR=13.20824026409078



Box\_5x5  
SNR=14.86927348690729



Median\_5x5  
SNR=16.000419255988476



Closing-then-opening  
SNR=13.542334613336049

- Gaussian noise, amplitude of 30



Gaussian noise,  
amplitude of 30  
SNR=2.1217983273556675



Box\_3x3  
SNR=9.810278016207285



Median\_3x3  
SNR=10.712554887294978



Opening-then-closing  
SNR=7.939777260342156



Box\_5x5  
SNR=10.816539073210816



Median\_5x5  
SNR=12.455487279237229



Closing-then-opening  
SNR=7.687726288573926

- Salt-and-pepper noise, probability=0.1



Salt-and-pepper noise,  
probability=0.1

SNR=-2.018712628207081



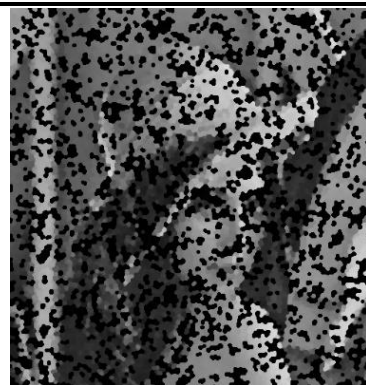
Box\_3x3

SNR=6.416597522615698



Median\_3x3

SNR=15.18026877002156



Opening-then-closing

SNR=-1.936994455129331



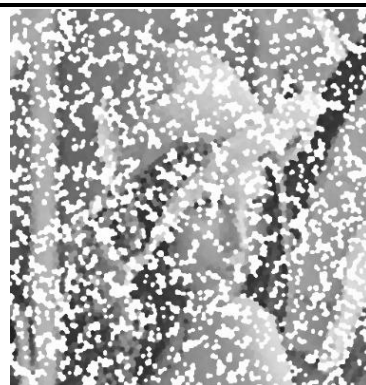
Box\_5x5

SNR=8.596989403169498



Median\_5x5

SNR=15.770525166508342



Closing-then-opening

SNR=-2.362236781006944

- Salt-and-pepper noise, probability=0.05



Salt-and-pepper noise,  
probability=0.1

SNR=0.9382750150987136



Box\_3x3

SNR=9.466096880267369



Median\_3x3

SNR=19.021731161457673



Opening-then-closing

SNR=5.2160939325070395



Box\_5x5

SNR=11.136543150624



Median\_5x5

SNR=16.31427757280987



Closing-then-opening

SNR=5.722280367247109