Howework 8 Report

Student:鞠之浩 ID:P10942A08

1. gaussian noise(amplitude of 10)



gaussian noise(amplitude of 10), SNR = 13.78914



 Box_3x3 , SNR = 17.58052



 Box_5x5 , SNR = 14.52620



Median_3x3, SNR = 17.59420



Median_5x5, SNR = 15.82442



Opening-then-closing, SNR = 5.54341



Closing-then-opening, SNR = 5.07133

2. gaussian noise(amplitude of 30)



gaussian noise(amplitude of 30), SNR = 4.14302



 Box_3x3 , SNR = 10.13377



 Box_5x5 , SNR = 10.76110



Median_3x3, SNR = 10.76278



Median_5x5, SNR = 12.21984



Opening-then-closing, SNR = 5.38755



Closing-then-opening, SNR = 3.44293

3. salt-and-pepper noise (probability 0.1)



salt-and-pepper noise (probability 0.1), SNR = 1.37082



 Box_3x3 , SNR = 5.34077



 Box_5x5 , SNR = 6.71861



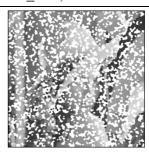
Median_3x3, SNR = 14.90185



Median_5x5, SNR = 15.61853



Opening-then-closing, SNR = 0.52241



Closing-then-opening, SNR = 0.12301

4. salt-and-pepper noise (probability 0.05)



salt-and-pepper noise (probability 0.05), SNR = 2.98639



 Box_3x3 , SNR = 8.82029



 Box_5x5 , SNR = 10.05386



 $Median_3x3, SNR = 19.14292$



Median_5x5, SNR = 16.24787



Opening-then-closing, SNR = 4.41342



Closing-then-opening, SNR = 3.15957