Computer vision
Homework8
Noise Removal

1. gaussian noise, amplitude = 10 SNR = 13.6018
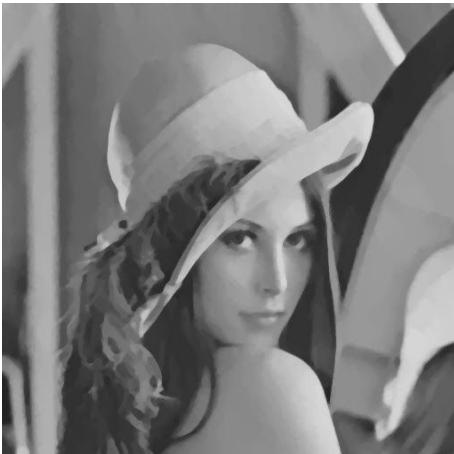

Box_3x3, SNR = 17.2905

Box_5x5, SNR = 14.1521

Median_3x3, SNR = 17.0723

Median_5x5, SNR = 13.5204

Opening-closing, SNR = 12.6453

Closing-opening, SNR = 12.9733

2. gaussian noise, amplitude =30, SNR = 2.19428
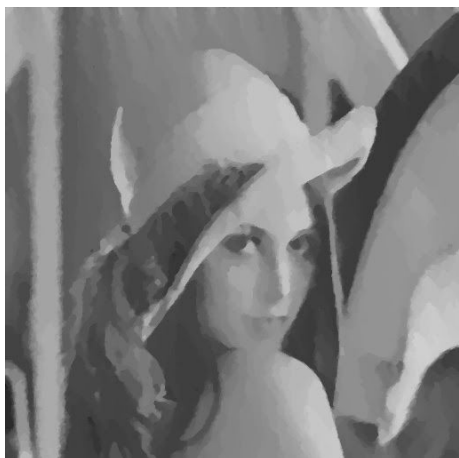

Box_3x3, SNR = 10.0534

Box_5x5, SNR = 10.6605

Median_3x3, SNR = 12.4197

Median_5x5, SNR = 9.5826

Opening-closing, SNR = 7.12942

Closing-opening, SNR = 6.71576

3. salt-and-pepper noise, probability =0.1, SNR = -2.10496
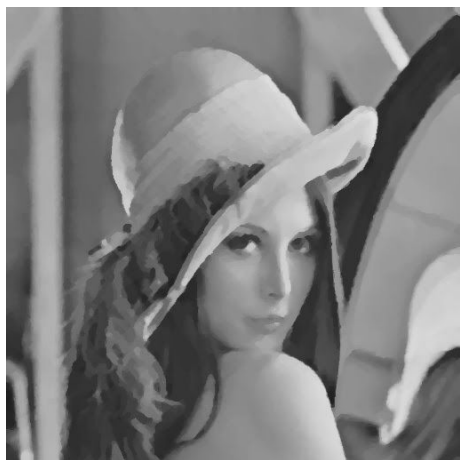

Box_3x3, SNR = 6.65619

Box_5x5, SNR = 8.5079
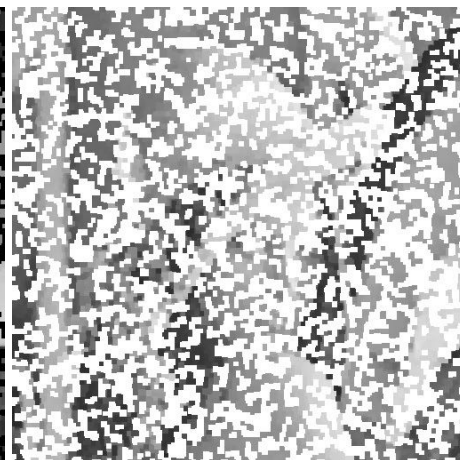

Median_3x3, SNR = 16.5337

Median_5x5, SNR = 12.9768

Opening-closing, SNR = -2.84523

Closing-opening, SNR = -3.13575

4. salt-and-pepper noise, probability =0.05, SNR = 0.871399
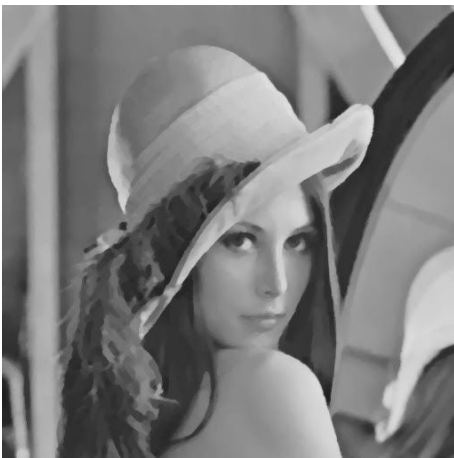

Box_3x3, SNR = 9.64565

Box_5x5, SNR = 10.8934

Median_3x3, SNR = 18.0151

Median_5x5, SNR = 13.9951

Opening-closing, SNR = 2.97874

Closing-opening, SNR = 2.44513