Report : Part 2 : Assignment 2

1) Barbara Pic (Original Image) :

Pixel Value

The gaussian noise added was :

Original Image
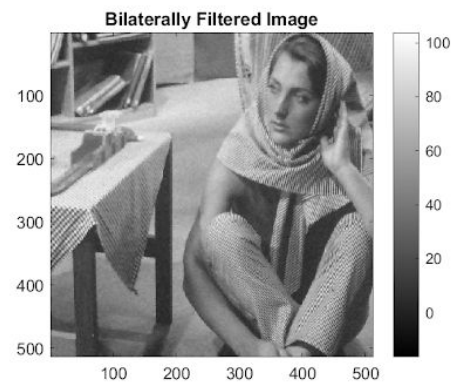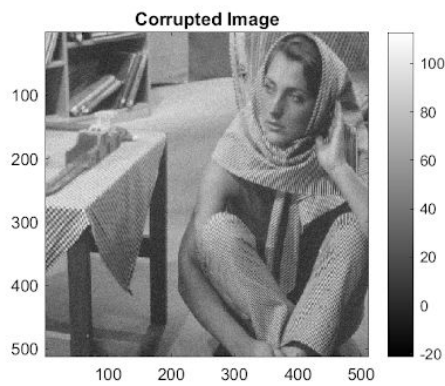
Gaussian Noise Mask
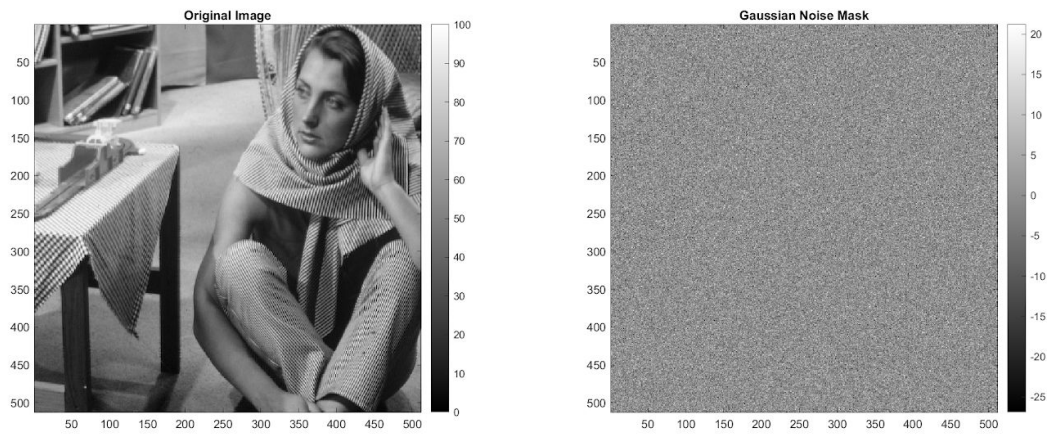
Pixel info: (400, 135) 30.77

The optimal values for this pic are :

Intensity_sigma : 10
Spatial_sigma : 1.40

RMSD best
   3.2992

RMSD 0.9 x optimal spatial
   3.3031
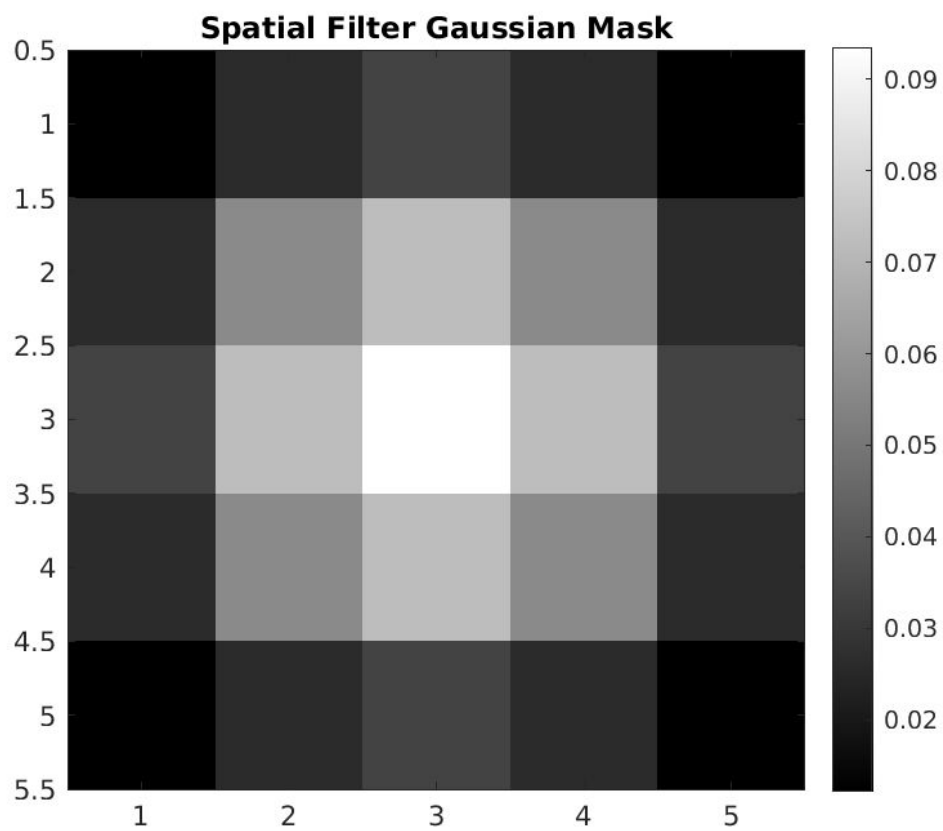
RMSD 1.1 x optimal spatial
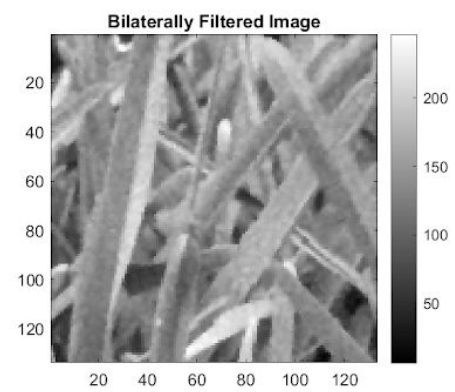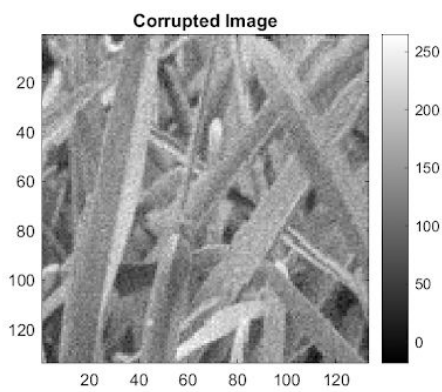   3.3005

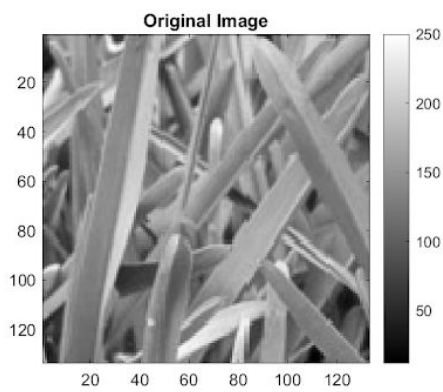RMSD 0.9 x optimal intensity
   3.3269

RMSD 1.1 x optimal intensity
   3.3086
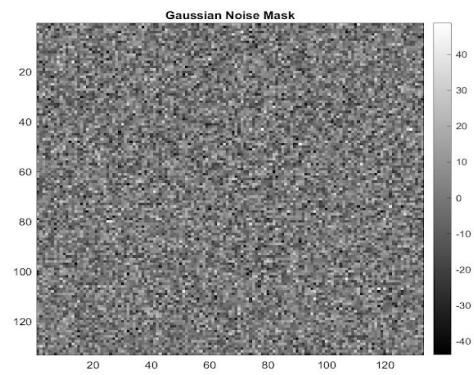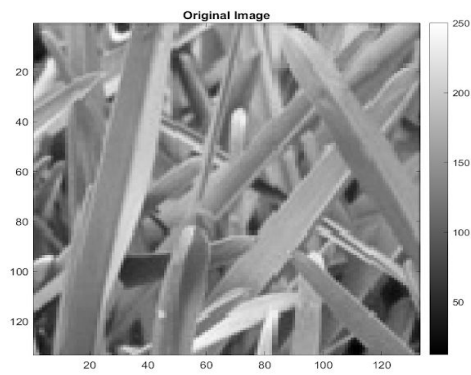
The spatial gaussian mask used :

2) Grass Pic :

Original Image

Corrupted Image

Bilaterally Filtered Image

) Pixel Value

The gaussian noise added was :

Original Image   Gaussian Noise Mask

Pixel info: (104, 35) 144

The optimal parameters :

42.8400 - intensity sigma

0.9000 - spatial sigma

%% Grass Pic %%

 RMSD best
    7.3624

 RMSD 0.9 * spatial
    7.3798

 RMSD 1.1* spatial
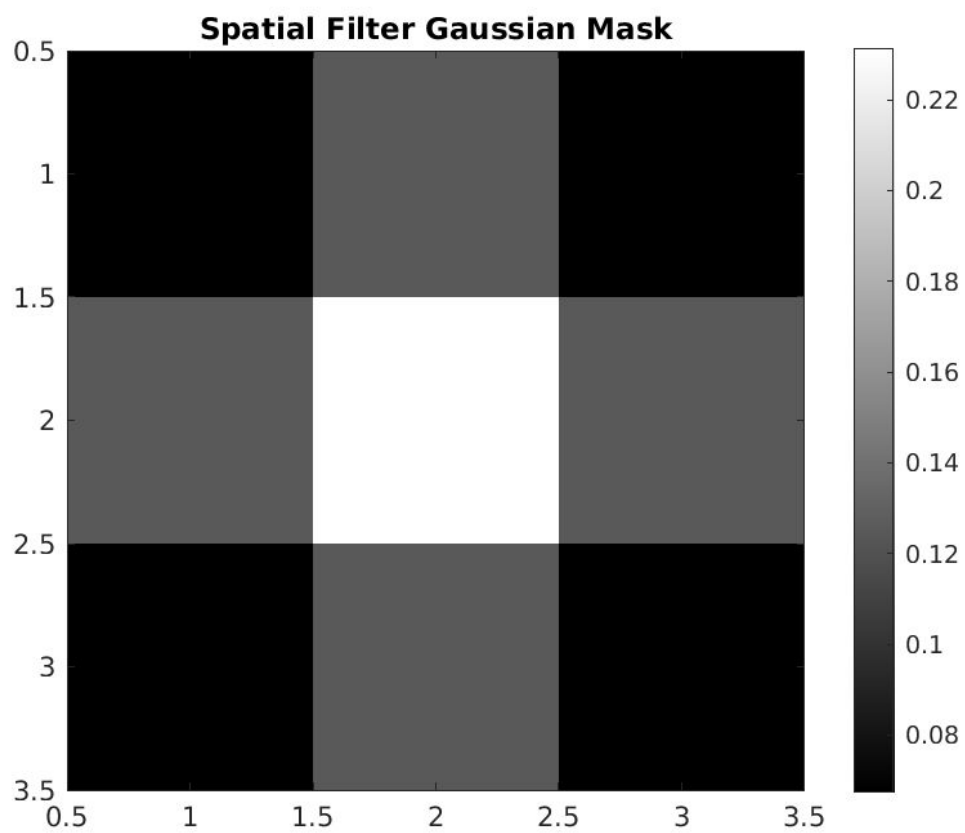   7.3770

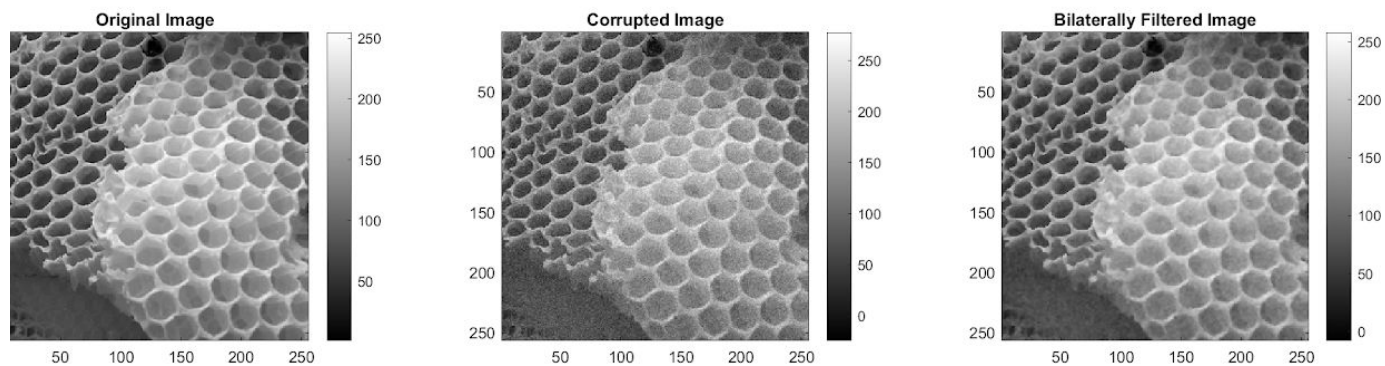 RMSD 0.9 *intensity
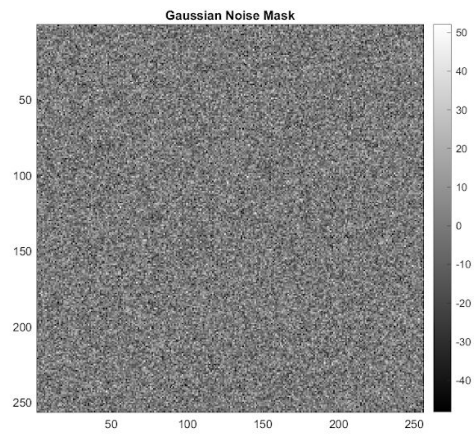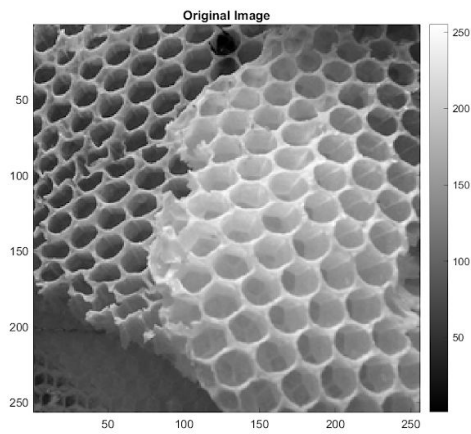   7.3746

 RMSD 1.1 *intensity
    7.3849

The spatial gaussian mask used :

3) Honey Comb Pic :

The gaussian noise added was :

Original Image   Gaussian Noise Mask

Pixel info: (200, 66) 119

Intensity-sigma : 40.6400

Spatial_sigma: 1.1000

% Honey Pic %%
 RMSD best
    7.3495

 RMSD 0.9 spatial
    7.3716

 RMSD 1.1 spatial
    7.5309

 RMSD 0.9 intensity
    7.3782

 RMSD 1.1 intensity
    7.3695

The gaussian mask for spatial used was :

Spatial Filter Gaussian Mask