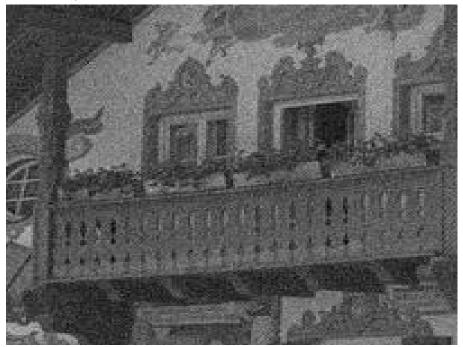
## 1. Kodak sigma 10 (Noisy) Running the code over a complete image was very much time taking so we have

demonstrated the results over the patch of image implementing the same functionality.



## 2. Kodak standard deviation=10 hs = 2 ,hr = 2 (smoothened)



3. Kodak standard deviation=10 hs = 0.1 hr=0.1



4. Kodak standard deviation=10, hs= 3 hr=15



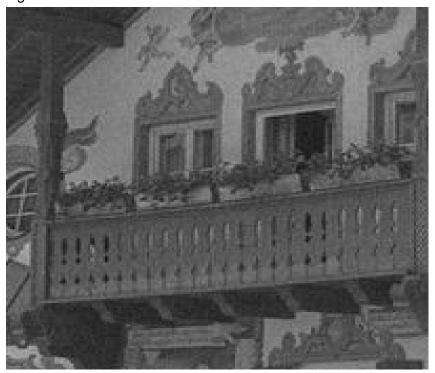
5. kodak with standard deviation = 5 (Noisy image)



6. Standard deviation =5, hs=2 hr=2



## 7. Sigma = 5 hs = 0.1 hr = 0.1



8. Standard deviation = 5, hs= 3 hr= 15



1. Noisy image with standard deviation =10



2. Mean shift filter output at h\_s=3 and h\_r=15



3. Mean shift output at h\_s=0.1 and h\_r=0.1



4. Mean shift output at h\_s=2 and h\_r=2



5. Standard deviation =5 (Noisy image)



6. Mean shift output at h\_s=3 and h\_r=15 (std = 5)



General observation through the output:

H\_s =3 and H\_r=15 image smoothens a lot and seems quite washed out.

H\_s=0.1 and H\_r=0.1 not much different as compared to noisy image.

 $H_s=2$  and  $H_r=2$  image smoothens and the level of smoothening is like image is more smooth as compared to output obtained using  $h_s=0.1$  and  $h_r=0.1$  and less than the smoothening level of  $h_s=3$  and  $h_r=15$ .