Image Processing Lab
Sem 1
Lab 9: Reducing high frequency noise
04/10/2018

1.Try to complete the lab questions during the lab time (in lab submission)
2.Please do not copy programs.
3.Use the cameraman image given in the Resources folder.

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1. **Anisotropic diffusion**
   Add noise to your image and do anisotropic diffusion.
   Refer the book "Image Processing" by Petrou, page 349

2. **Edge Adaptive Smoothing**
   Add noise to your image and do edge adaptive smoothing.
   Refer the book "Image Processing" by Petrou, page 337
   (a) Read the image
   (b) Add gaussian noise
   (c) For each pixel , consider its 3x3 neighbourhood and keeping each of them as centre pixel, define 9 such kernels
   (d) Calculate the mean and variance of each of these 9 kernels
   (e) Choose the kernel with the least variance
   (f) Find the average of that kernel and replace the original center pixel with this average