**Classwork 4**

**Assignment 1:**

Define a function **myMasking** which receives an image and a mask, applies the mask to the image and returns the resulted image of the same size as original image and with defined borders. Call example: **myMasking(Img, myMask)**

Test you function with Gaussian Mask and Laplacian Mask.

**Assignment 2:**

Define a procedure which loads the "BlurryImage1.jpg", applies a given mask to the image and shows the loaded image and filtered image in the same window (Matplotlib).

**Assignment 3:**

Define a function **myHistPlot()** which receives the two images from assignment 2 (original and filtered) in gray scale. Then calculate the histogram of each one (you are not allowed to use built in functions to calculate the histogram). Plot the two histograms alongside each other and explain the differences.

**Assignment 4:**

Define a procedure which loads an image named "NoisyS.pgm", applies Median filter of 10th order to the image, than applies a 5x5 Gaussian mask to the resulted image and then plots side by side the original image and the image after Gaussian filter.

**Assignment 5:**

Debug the script named "Debugging.py" (for this script, the image named "cat" should be downloaded from moodle).