

# HW3

## ❖ Please follow the instructions below.

- ✓ Read "lena.png"
- ✓ Perform average filtering on the left half of the image
  - Set the mask size as (7,7)
  - blur(in, out, Size(val1, val2))
    - » Blurs an image using the normalized box filter
    - » in: input image, out: output image, Size(val1, val2): blurring kernel size
- ✓ Read "moon.png"
- ✓ Perform sharpening on the right half of the image
  - Perform sharpening using second derivative
  - Laplacian(in, out, CV\_16S);
    - » calculates the Laplacian of an image
    - » in: input, out: output, CV\_16S: desire depth of output
- ✓ Read "saltnpapper.png"
- ✓ Perform median filtering on the image
  - Set aperture size as 9
  - medianBlur (in, out, val)
    - » Blurs an image using the median filter
    - » in: src , out: dst , val : aperture size(must be odd and greater than 1)

# HW3

## ❖ Please follow the instructions below.

- ✓ Display 6 windows
  - The name of each window should be
    - » "lena"
    - » "lena\_filtered"
    - » "moon"
    - » "moon\_filtered"
    - » "saltnpapper"
    - » "saltnpapper\_filtered"