Exercise 3
Due: Friday, May 11, 2018

Note:
- Submit your exercises by pushing them to your Github account/repositories
- Use Python
- Use PyCharm or Jupyter Notebook as your choice
- Use OpenCV or Scikit-image as your choice
- Send me an email if you have any difficulty in completing the exercise

1. Download any color image from Internet and save it to your computer

2. Write program to complete the following works:
    - Convert the downloaded image from 1. to a grayscale image
    - Apply Canny Edge detector to the grayscale image with fixed threshold as your choice (https://en.wikipedia.org/wiki/Canny_edge_detector)
    - Write a small application to find the Canny edge detection whose threshold values can be varied using two trackbars

3. Take a break

4. Review the watershed algorithm (https://en.wikipedia.org/wiki/Watershed_(image_processing))

5. Write program to complete the following works:
    - Download any color image from Internet and save it to your computer
    - Convert the downloaded image to a grayscale image
    - Apply watershed algorithm to the above image and observe outputs with different parameters

    You can refer to the following to understand more about this algorithm: http://opencv-python-tutroals.readthedocs.io/en/latest/py_tutorials/py_imgproc/py_watershed/py_watershed.html