ASSIGNMENT 1 **SUBMISSION DATE: 19-Jan-2018**

Edge and Corner point detection

1. Download and install OpenCV. Practise with a few simple problem.
    - You may choose any platform (Windows / Linux / Android) and use any programming language (C/C++/Java/Python).
2. Click a photograph of your own.
    - Suggest that you click a photograph of a man-made object, like a building, with sharp edges and corners.
    - Use the photograph with full resolution (at least 2Mpx) in your experiments.
3. Apply Gaussian blur on the image to reduce noise.
4. Implement Canny Edge detector. In particular, implement Non-maximum suppression and Hysteresis Thresholding.
    - Show the result as an edge image, with color representing the orientation of the edge (you may use the hues in the HSV model) and intensity representing the magnitude of the edge at any given point of the edge image.
5. Implement Harris corner detector.
    - Show the results by marking the corners with a square or a circle.
6. You are encouraged to reuse the code available with OpenCV tutorial, with or without modification, but with appropriate understanding.
    - **Experiment with different values of the parameters, e.g. radius of Gaussian blur, Thresholds, etc.**
7. You will need to submit a the code, the results (image files) and a document showing the results of your experiments with different parameters. The results should refer to output image file names and your observations in it (e.g. missed edges/corners, spurious edges/corners, etc.).
    - Zip all the files. Name it <roll-no>_Assignment1.zip.
    - Upload the zip-file in a web-folder and submit the link in Piazza. Make sure to provide global read access.