ASSIGNMENT 2 **SUBMISSION DATE: 31-Jan-2018**

Photo stitching

1. In this assignment, you will need to use some code from Assignment 1
2. Click two photos of a man-made object, like a building, with sharp edges and corners
    - There should be about 30% of overlapping area between the two photos with several corner points in it.
    - Use the photograph with full resolution (at least 2Mpx) in your experiments.
3. Apply Gaussian blur on the images to reduce noise. Identify the corner points in the images using Harris corner detector. Save the coordinates of the corner points.
4. Manually mark corresponding corner points in the overlapping area of the two images. There should be at least some 20-30 common corner points in the two images.
5. Estimate parameters of the projective (perspective) transformation of the coordinate system of any of the two images to that of the other image.
    - Do a projective transformation of the first image to the coordinate system of the second image using the transformation matrix.
6. Superimpose the projected first image with the second image maintaining the correspondence of the common corner points. Use original images, not the blurred images.
7. Crop the image to a rectangular shape. Present the result as an stitched image.
8. You are encouraged to reuse the sample codes available with OpenCV tutorial, with or without modification, but with appropriate understanding.
9. You will need to submit a the code, the results (image files). Mark the corresponding / common corner points on the original images, perspective changed image and stitched image.
    - Zip all the files. Name it <roll-no>_Assignment2.zip.
    - Upload the zip-file in a web-folder and submit the link in Piazza. Make sure to provide global read access.