# Coding Assignment Report: Image stitching

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### 1 Panorama Stiching Steps

To stitch two or more images we need to follow certain steps:

- 1. Detect keypoints (DoG, Harris, etc.) and extract local invariant descriptors (SIFT) from the two input images.
- 2. Match the descriptors between the two images.
- 3. Use the RANSAC algorithm to estimate a homography matrix using our matched feature vectors.
- 4. Apply a warping transformation using the homography matrix obtained from last step (3).

### 2 cv2.Stitcher\_create().stitch([R,L])

cv2.Stitcher\_create().stitch([R,L]) method is taking two images with some overlap and doing the steps mentioned above.

## Stiching images with some overlap



Figure 1: Two images with some overlap



Figure 2: Stiched image Black areas are coming because the images are not absolutely parallel.