

Task 1) Map the book in the image to a rectangular window of width=400 and height=400.
Function for homography- `cv2.findHomography(pts_src, pts_dst)`

Task2) Align the book in the book1.jpg to the book in the book2.jpg

```
pts_src = np.array([[141, 131], [480, 159], [493, 630],[64, 601]], dtype=float)
```

```
pts_dst = np.array([[318, 256],[534, 372],[316, 670],[73, 473]], dtype=float)
```

Task3) You can take tsukuba_l and tsukuba_r images from the drive link and use

```
cv2.StereoBM_create(numDisparities=16, blockSize=15) to get disparity map
```

After getting the disparity map try to remove objects from the image whose disparity is less than a particular threshold say 120.

Task4) You can take the view0.png and view1.png from the link and perform the SSD based patch matching to get the disparity map. (Take this as homework and submit it in your git repository with a report of different cost metrics).