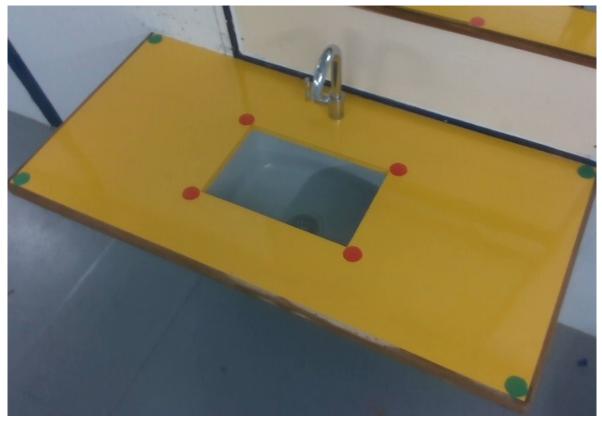
TASK: Segmenting the 4 markers placed at the corners of the countertop

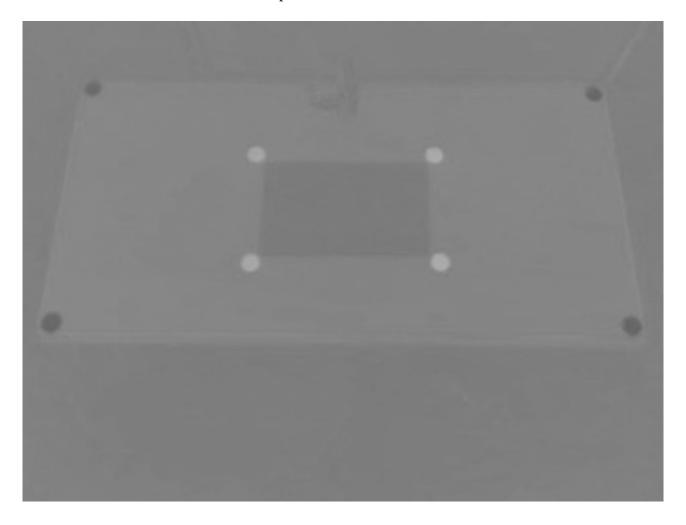
The image of the countertop after placing the markers is as shown below





Inner rectangle (sink region) - Red colour markers Outer rectangle (countertop region) - Green colour markers To segment the markers based on colour I have used simple thresholding in the LAB colour space for inner and outer markers .

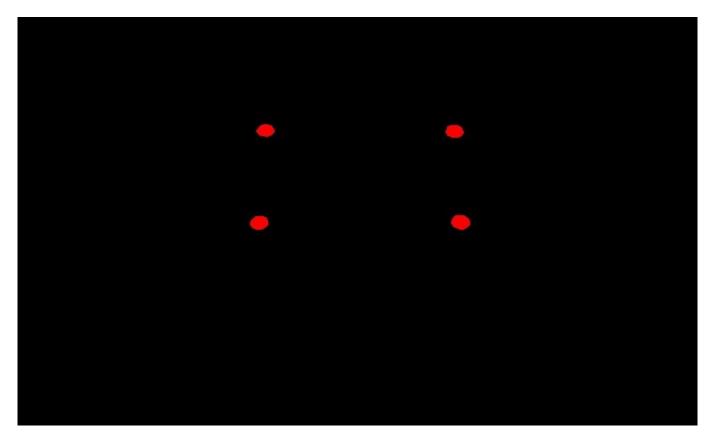
For the markers: In the LAB color space the A channel is shown as below

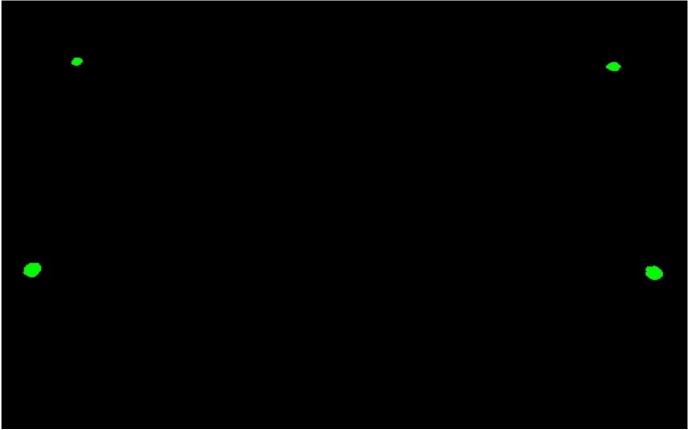


The Range for Red markers (inner markers) = (155 - 185)

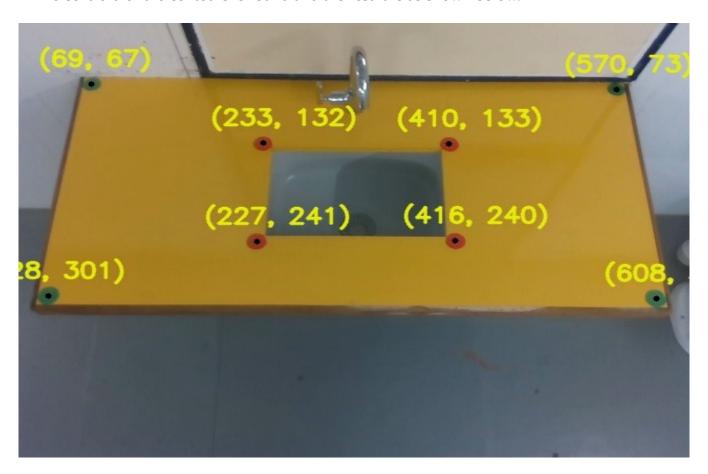
The Range for green markers (outer markers) = (100 - 110)

The segmentation is as shown below





The centroid of the contours is found and the result is as shown below.



Using the points I have drawn an enclosing rectangle for it. It is as shown below

