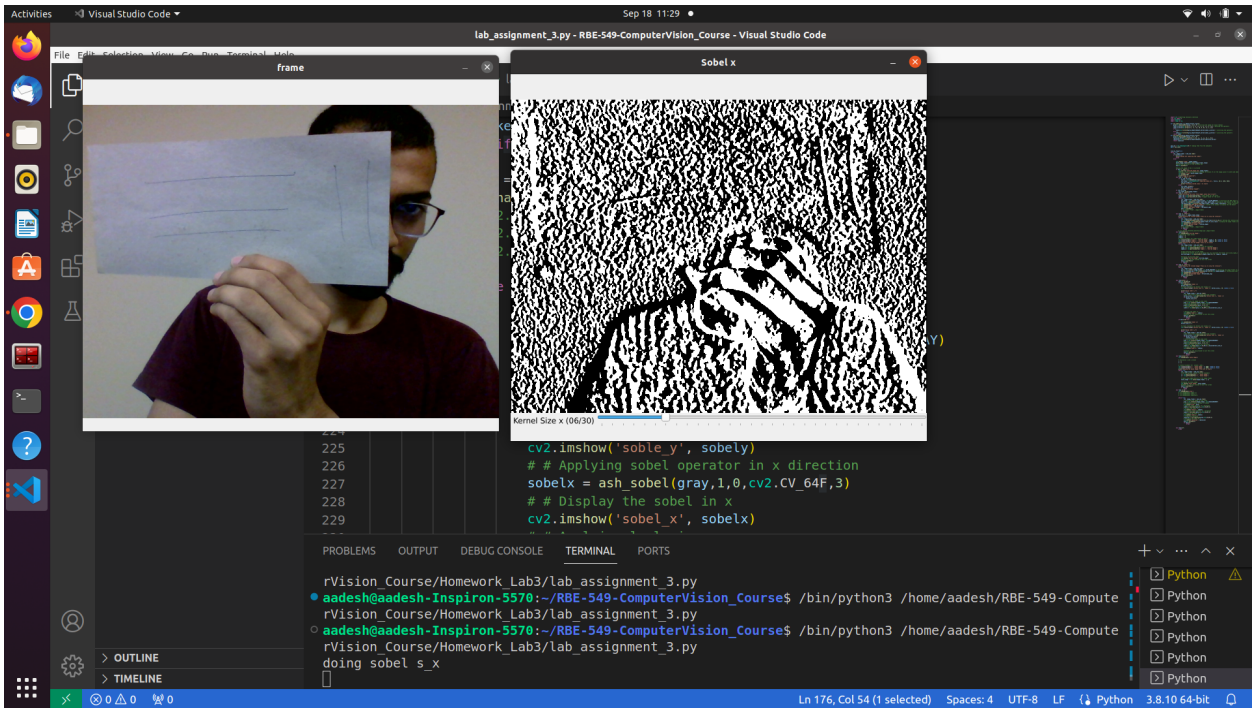
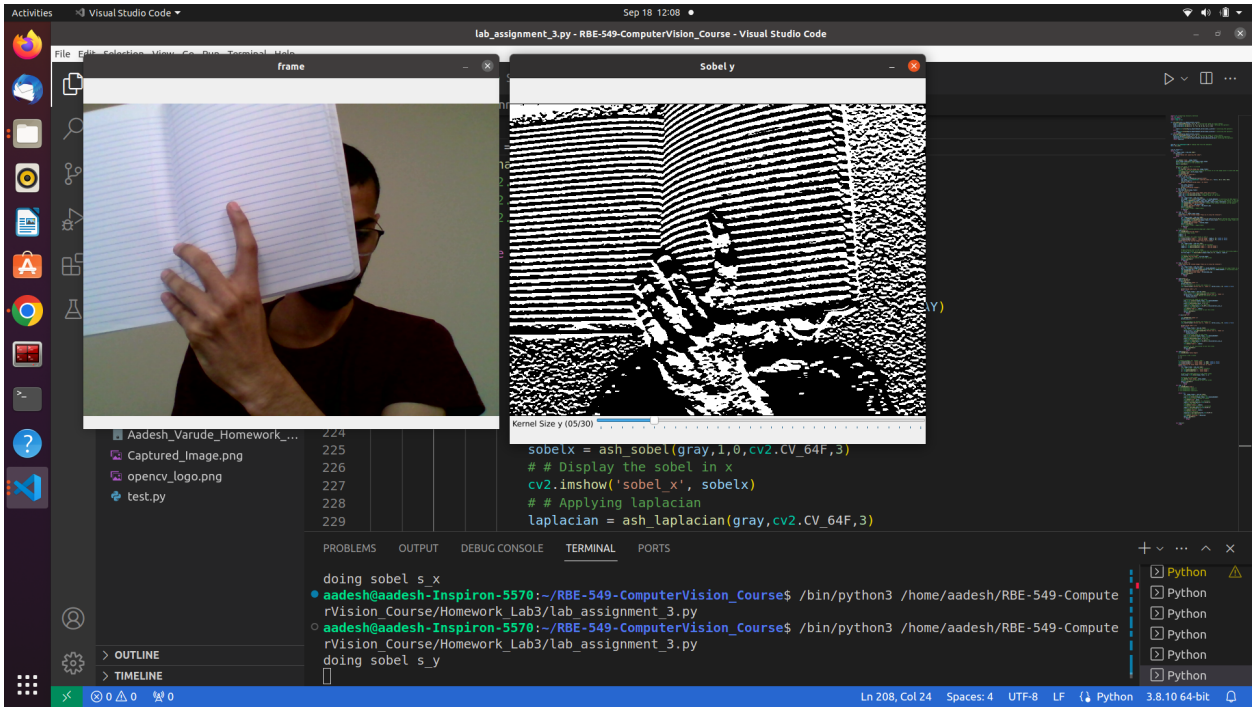
Name : Aadesh Surendra Varude
Week3: Lab Report:

Part 1:

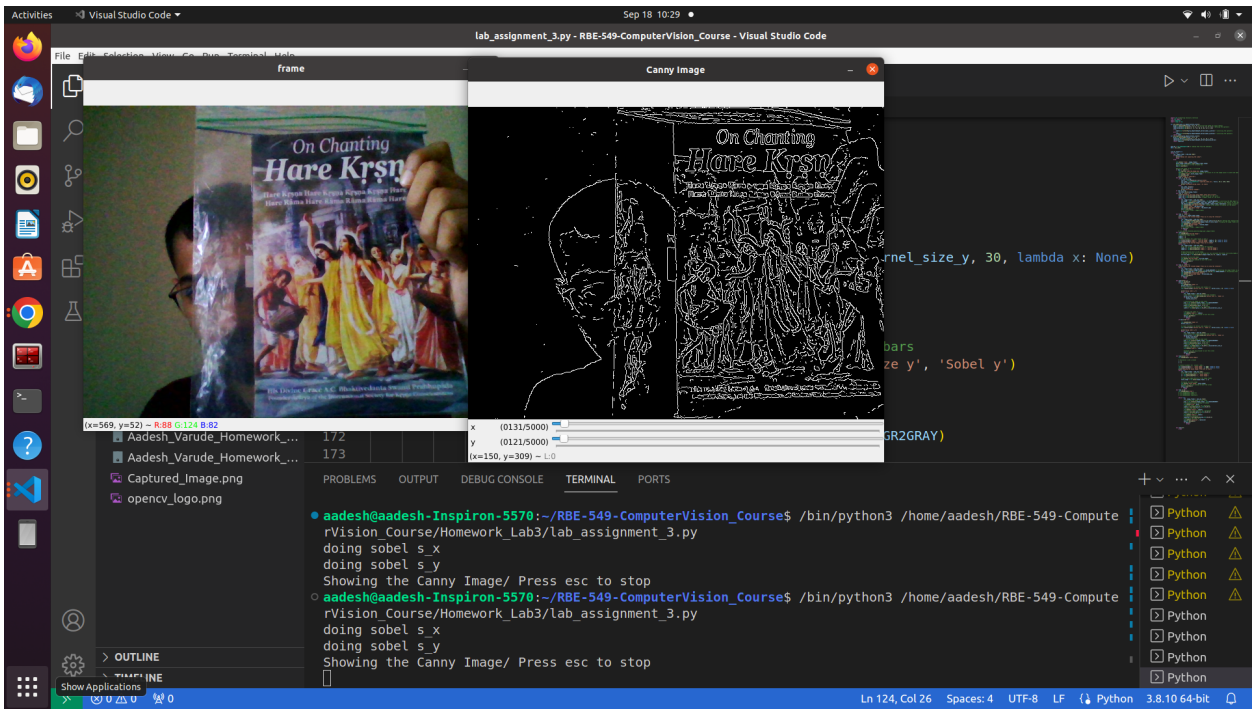
a) By pressing **'s+x'** generate the Sobel X and add a trackbar to adjust the kernel size [5-30].



b) By pressing **'s+y'** generate the Sobel Y and add a trackbar to adjust the kernel size [5-30].

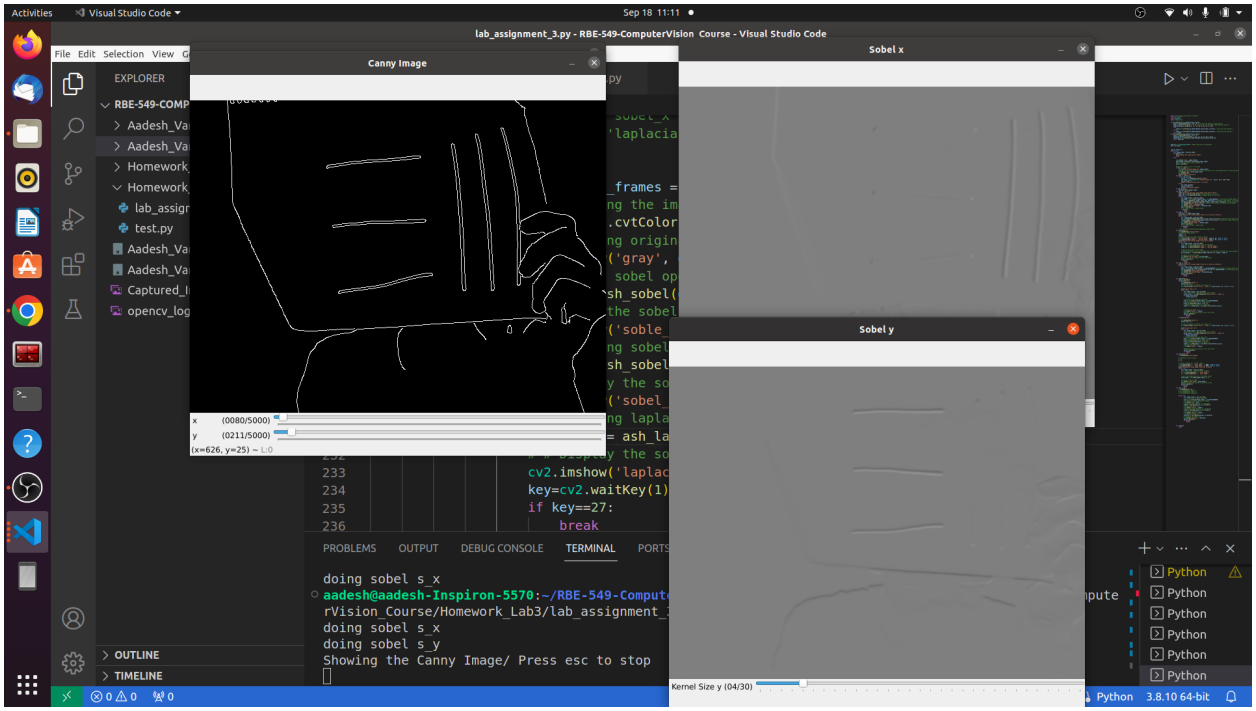


c) By pressing **'d'** generate the Canny edge detector and add two trackbars to adjust the threshold 1 and threshold 2 [1 - 5000].



Extra experiments:

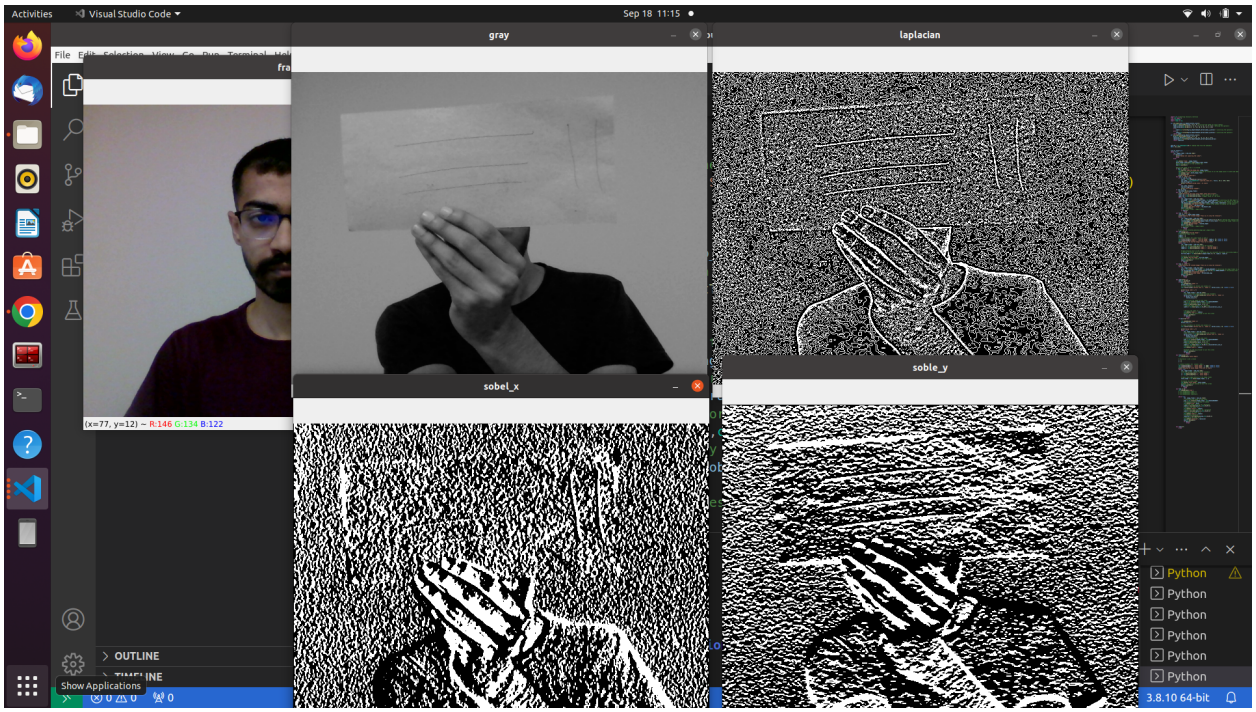
The ddpeth parameters provides a lot of options I tried the CV_16S this reduces the over flow and provide better results for the sobel operator, there are various other options that could impact the visual result by changing the ddept operator in the video recording and my code I have used the standard depth option



Part 2:

e) Develop your custom Sobel and Laplacian Python functions (*without using the cv.Sobel() and cv.Laplacian() OpenCV functions*) to generate the edges from the original camera stream

f) By pressing **'4'** make your Camera app show four windows as the one below with the labels (Original, Laplacian, Sobel X, Sobel Y)



Note : The screen recorder video gets a bit pixelated, I have attached the screenshot to show that my code works