

Exercises 20

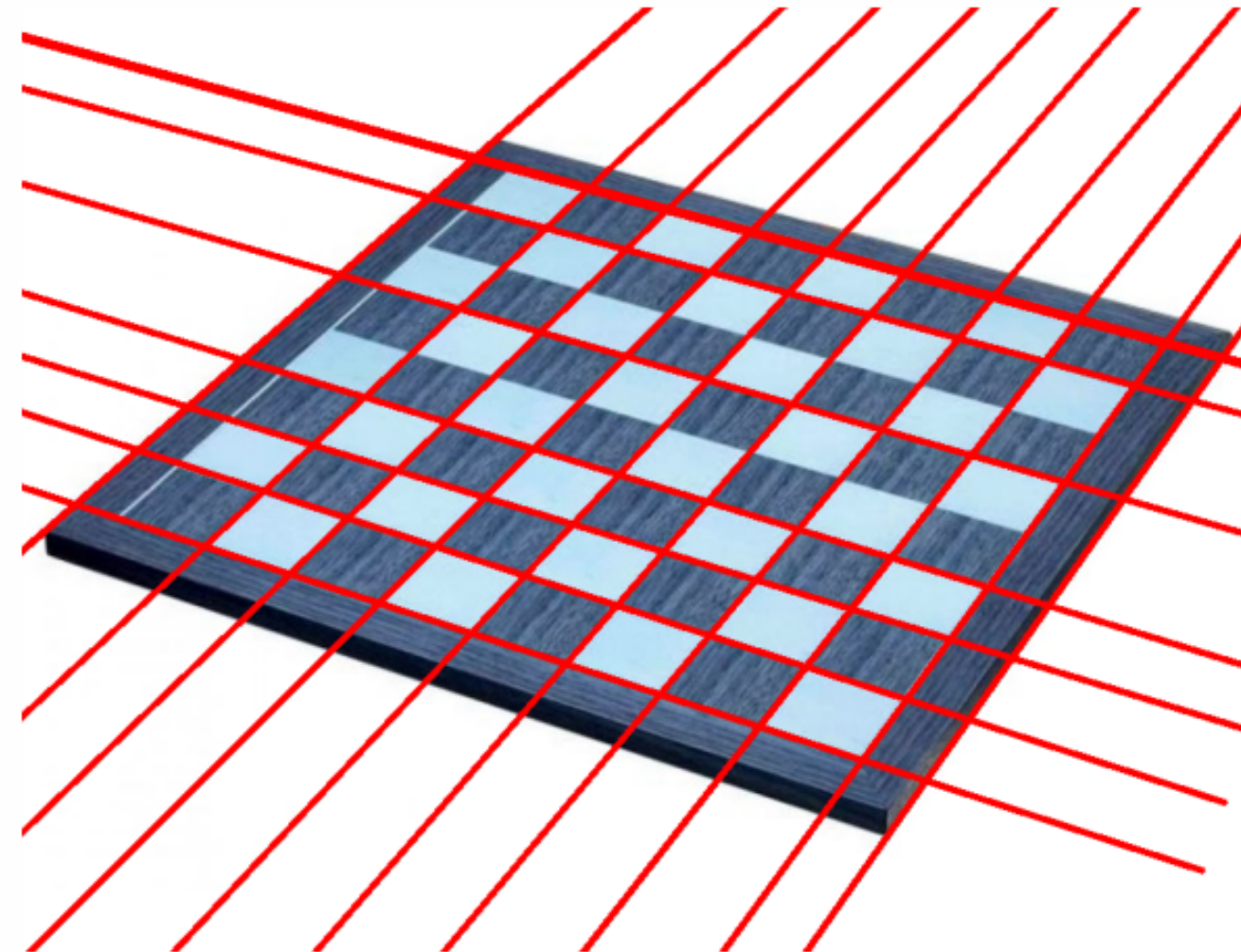
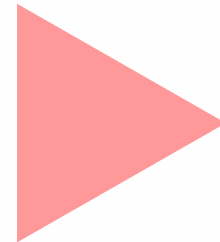
Hough Transform, Contours & Video (1700)

1.If we have a point with coordinates $(x=5, y=6)$ in the image space. Find the line corresponding to this point in MC space (Slope and Intercept space), and the sinusoid corresponding to this point in Rho-Theta Space.(Obtain the Equations and Plot them)

200

2. Find and plot the lines in the image (a.jpg), for edges with intensity more than 150. and Votes more than 200, show the line with thickness = 2, and with the color pure green!
(Lower threshold for canny = 100, Other parameters = Desired)

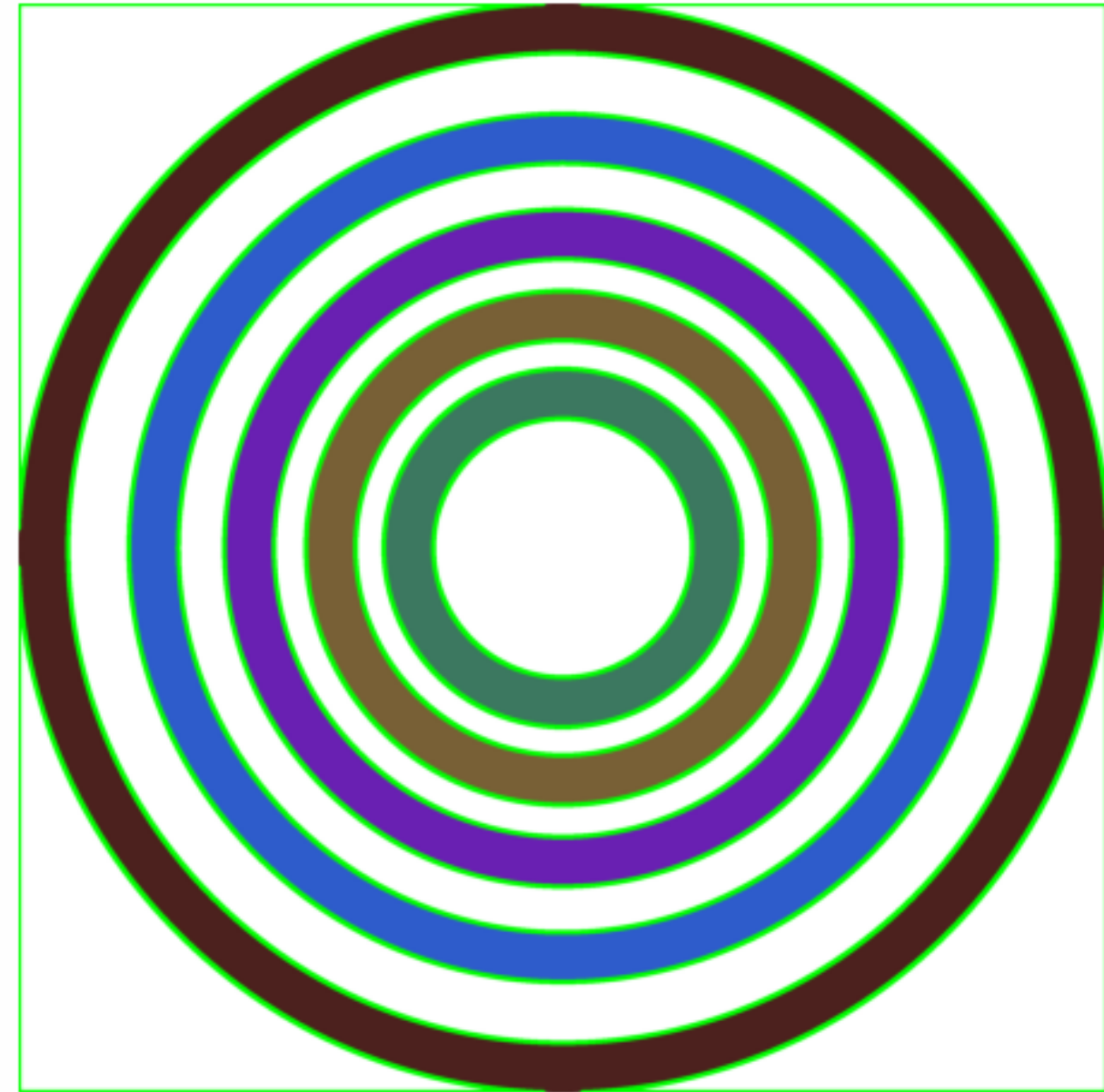
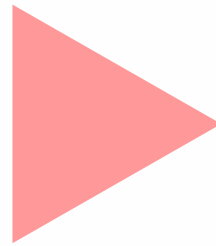
For Example:



3. Find and plot the Circles in the image (b.jpg), for pixels with intensity greater than 120.

500

For Example:



**4. Split the 8th frame of the video (lane.mp4) and Denoise that, then find the edges, and finally show the edges on the original frame!
(denoising and edge detection method are desired!)**

500