Finding Lane Lines on the Road

Writeup Template

1. Describe your pipeline. As part of the description, explain how you modified the draw_lines() function.

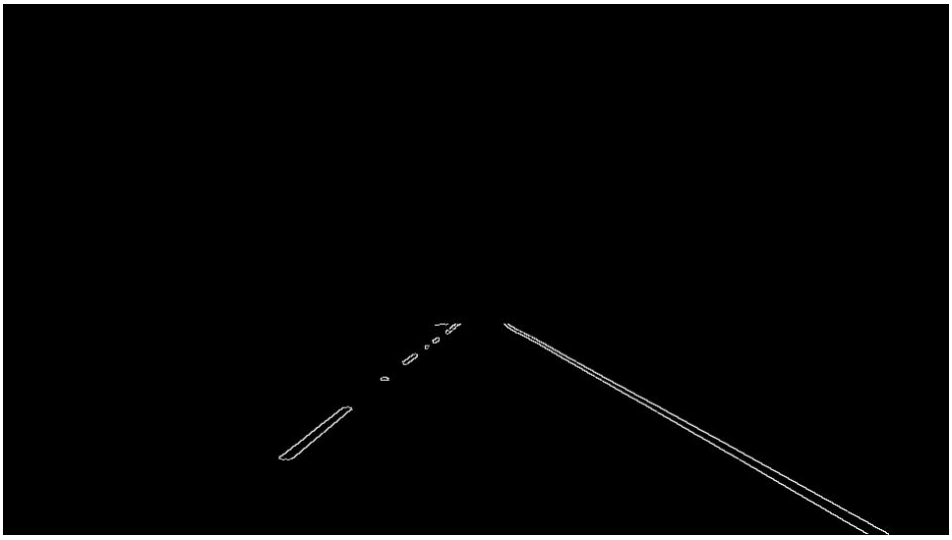
My Pipeline consisted of following steps

1. Converting the image to grayscale

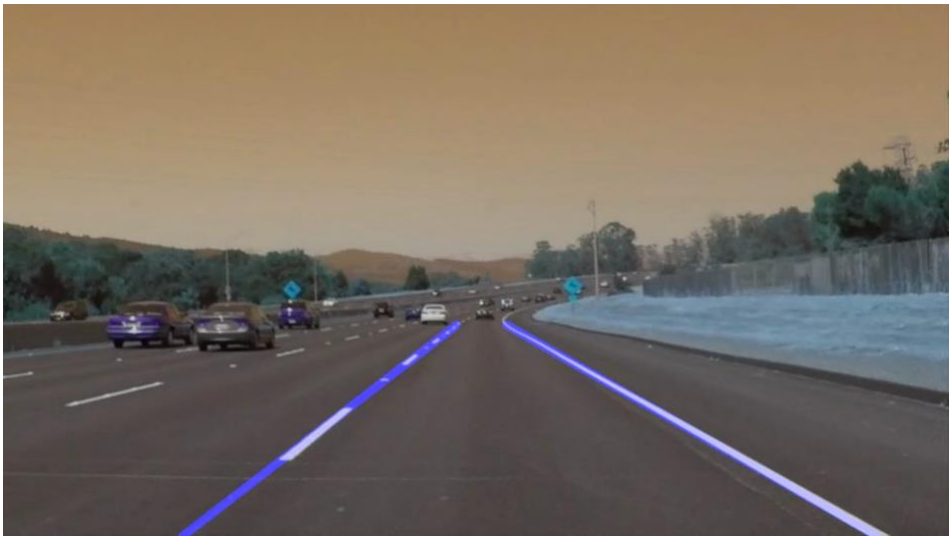
2. Smooth the image

3. Canny Edge Detection

4. Optimized the image to get the region of interest



5. Run Hough lines with Hough transform parameters and draw the lines



Draw lines function

In Order to draw lines on left and right lanes for the final image I did

1. Calculate the slope of line and determine if it is left or right lane
2. Collect the points for left lane and right lane separately and slope
3. Calculate the intercept b = y-mx (mean of y – mean of slope*mean of x)
4. using the intercept we calculate the minimum x = y-b/m
5. calculate the y minimum of x by min of image from bottom to minimum of right lane y
6. Using the min and maximum points for each part of lane. Draw

2. Identify potential shortcomings with your current pipeline

If there are more curves in the image, it is not accurate

3. Suggest possible improvements to your pipeline

Include all the lanes on the road and solve the curves