Describe the effect each of the P, I, D components had in your implementation.

In my project Setting the p parameter helped me in getting the project rolling. Car started but was having oscillations and the car was even going off track. I started with Initial Value of D and increased it until I was able to clear the track and the oscillations stopped. But it was not staying always in the Middle of the road and sometimes it was going off road. Setting I value helped me in that.

Describe how the final hyperparameters were chosen.

Intuition behind choosing these values

I first choose the P value to get it running, it was showing a lot of oscillations

Then I started incrementing D value to make the trajectory go as smooth as possible, Around the value 8 it was the best but still sometimes it uses to touch the Side roads

After that I gave a small I value, and it became very smooth