PID controller project

I first started with the proportional gain controller, started with 0.2, this was causing the car to understeer near the sharp bends and falling off. So I increased to 5, this was causing the car wobble in left and right near the turns. So I finalized on Kp=2.

Then I set the differential gain to 12 to pull the car back faster when its off. I saw reduced wobble.

With Ki, did not notice much difference. It looked like constant wobble around the centre has reduced