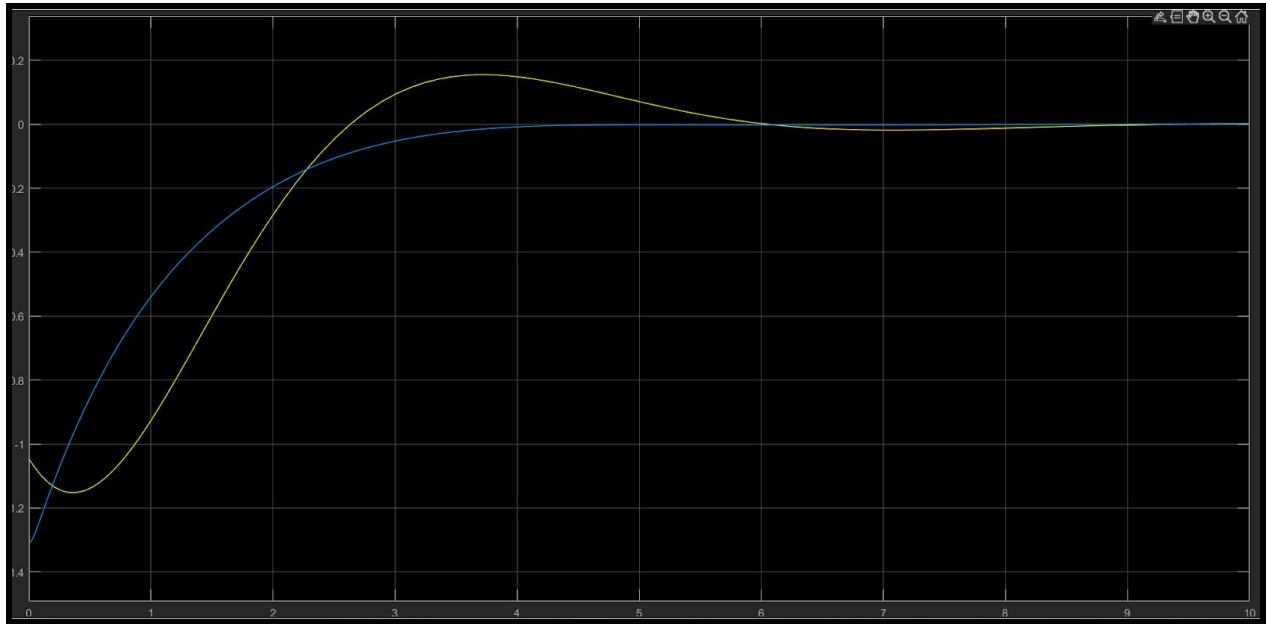
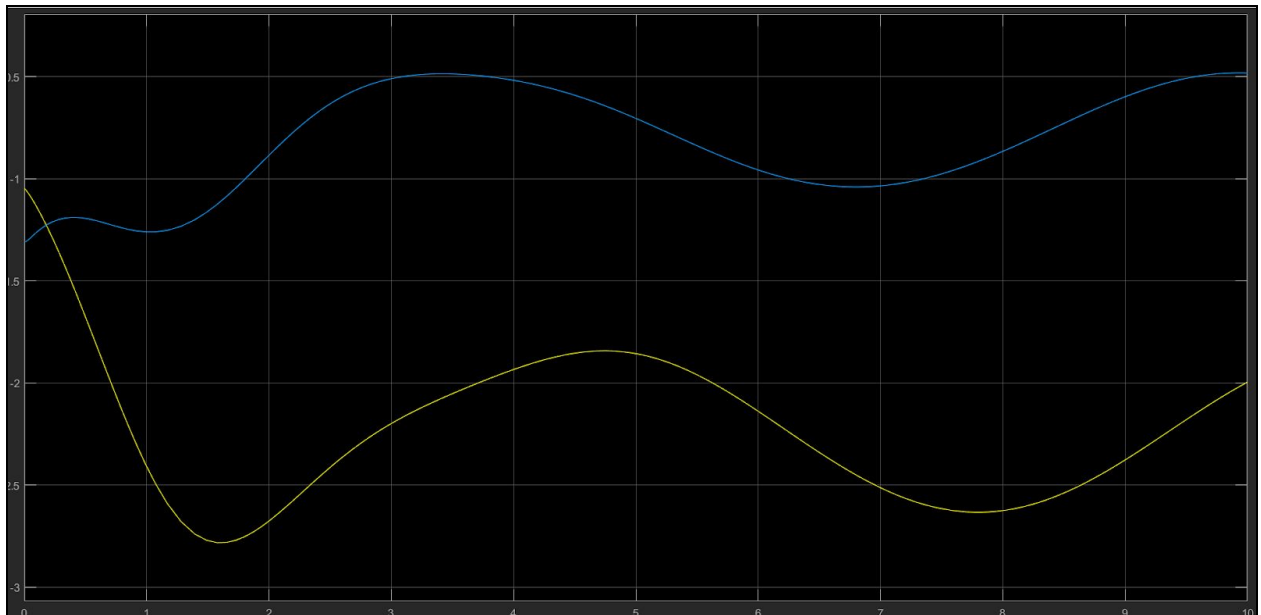


Part 1



In this case: $K_p = 5$, $K_d = 5$. We can clearly see that the error tends to zero as time increases. The effect is very prominent because this controller focuses on path tracking and error minimization.

Part 2



In this case: $K_p = 5$, $K_d = 5$. We can clearly see that the error does not tend to zero as time increases. This model's controller is not very effective in error minimization. Because this does not focus on path tracking.