

Solution 1b

- Next page has hand written solution to find closed-loop transfer function (CLTF). I created simulink model using the CLTF.
- Inside the main folder, open “**prob_1b**” folder for Simulink model and Matlab script.
 - First run “params.m” script alone and then open the pole-zero block in simulink model to check the poles.
- I have tuned Kp and Kd until I get all the 4 poles stable and damping ratio for all the poles ≥ 0.3 . Doing so, I get:
 - **Kp = 1000**
 - **Kd = 1700**
- Pole locations are indicated in the image below –

