

ASSIGNMENT 1

```
commandwindow
clc
clear
close all
bdclose ('all')
kp=15;
zeta= 0.3;
tau = sqrt(21);
uinitial = 0;
ufinal = 2.5;
tstep = 5
open('Dumah1')
zetadata = (0.3:0.3:1.5);
for i=1:length(zetadata);
    zeta = zetadata(i);
    [tsim,usim,ysim] = sim('Dumah1',[0.1:120])
    plot(tsim,ysim)
    hold on
end
grid on
grid minor
legend('zeta=0.3','zeta=0.6','zeta=0.9','zeta=1.2','zeta=1.5')
```

Simulink file

