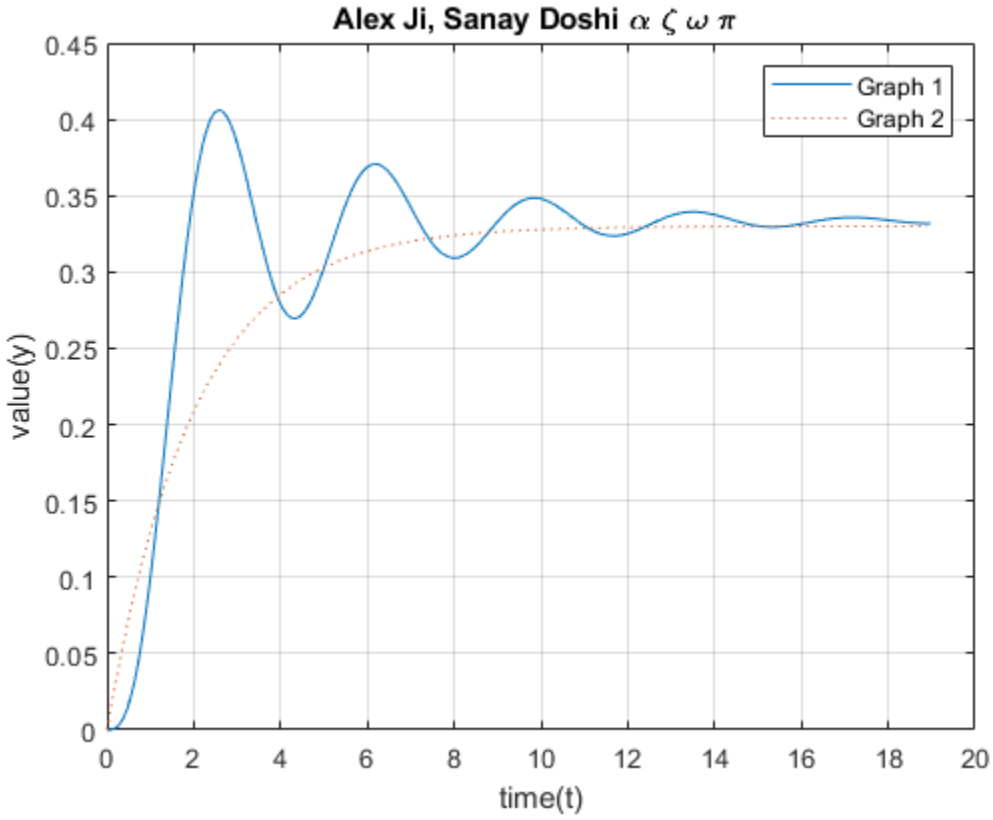
```
% Sanay Doshi, Alex Ji, Lab 0

h1 = tf([1],[1 1])
h2 = tf([1],[1,0.5,3])
h3 = h1 *h2
% stepplot (h3)
% grid on

% steady state value = 0.3331191
fig = figure
[y, t] = step(h3);
peak_val = max(y);
plot(t,y)
grid on
t2 = 0:0.1:max(t);
z = 0.33*(1-exp(-0.5*t2));
hold on
plot(t2,z,'LineStyle',':')
legend('Graph 1', 'Graph 2')
xlabel('time(t)')
ylabel('value(y)')
title('Alex Ji, Sanay Doshi \alpha \zeta \omega \pi ')
orient(fig, 'landscape')
```

```
h1 =

    1
  -----
  s + 1

Continuous-time transfer function.

h2 =

         1
  ---------------
  s^2 + 0.5 s + 3

Continuous-time transfer function.

h3 =

              1
  --------------------------
  s^3 + 1.5 s^2 + 3.5 s + 3

Continuous-time transfer function.

fig =

  Figure (3) with properties:
```

```
     Number: 3
       Name: ''
      Color: [0.9400 0.9400 0.9400]
   Position: [680 458 560 420]
      Units: 'pixels'

  Use GET to show all properties
```



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