```matlab
%Transfer Function Analysis for High-Pass 6th Order Butterworth Filter
%ECE223 Sp19, Jennifer Jordan & David Lay
s = tf('s');
H = 1/
(2.53636*10^-19*s^6+1.23201*10^-15*s^5+2.99159*10^-12*s^4+4.60529*10^-9*s^3+4.7260
+1)

%Figures:
figure(1);
bode(H);
title('Low-Pass Butterworth Filter Bode Plot');
figure(2);
impulse(H);
title('Low-Pass Butterworth Filter Impulse Response');
figure(3);
step(H);
title('Low-Pass Butterworth Filter Step Response');
figure(4);
pzplot(H);
title('Low-Pass Butterworth Filter Pole-Zero Plot');
```

H =

$$1$$

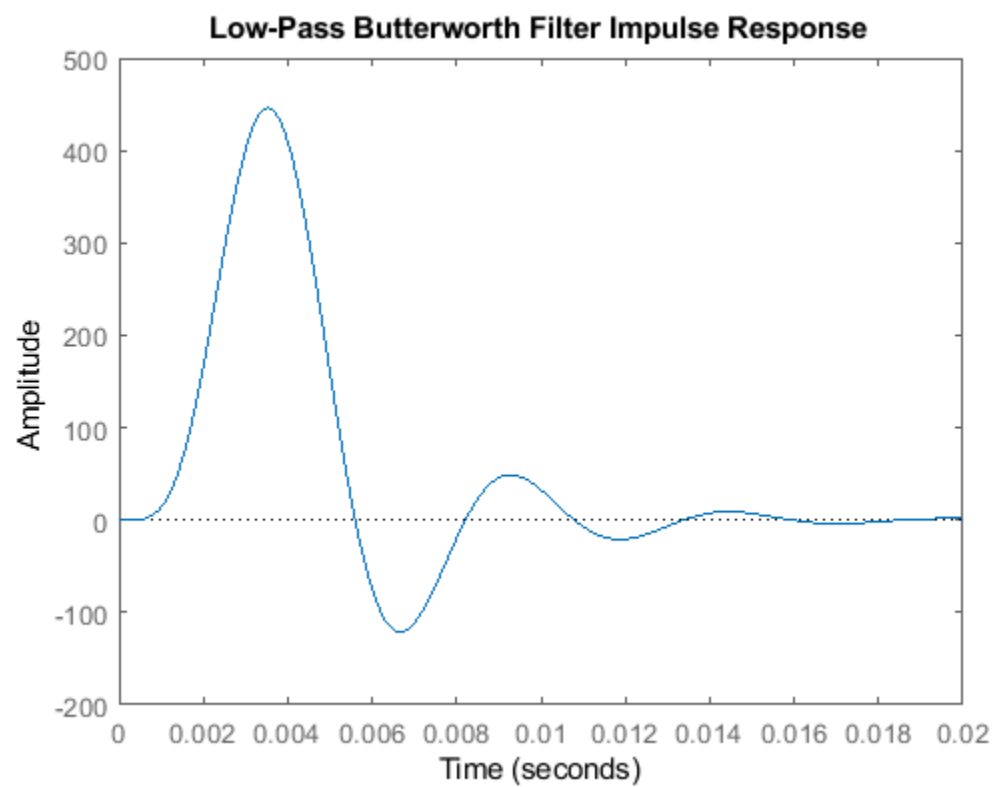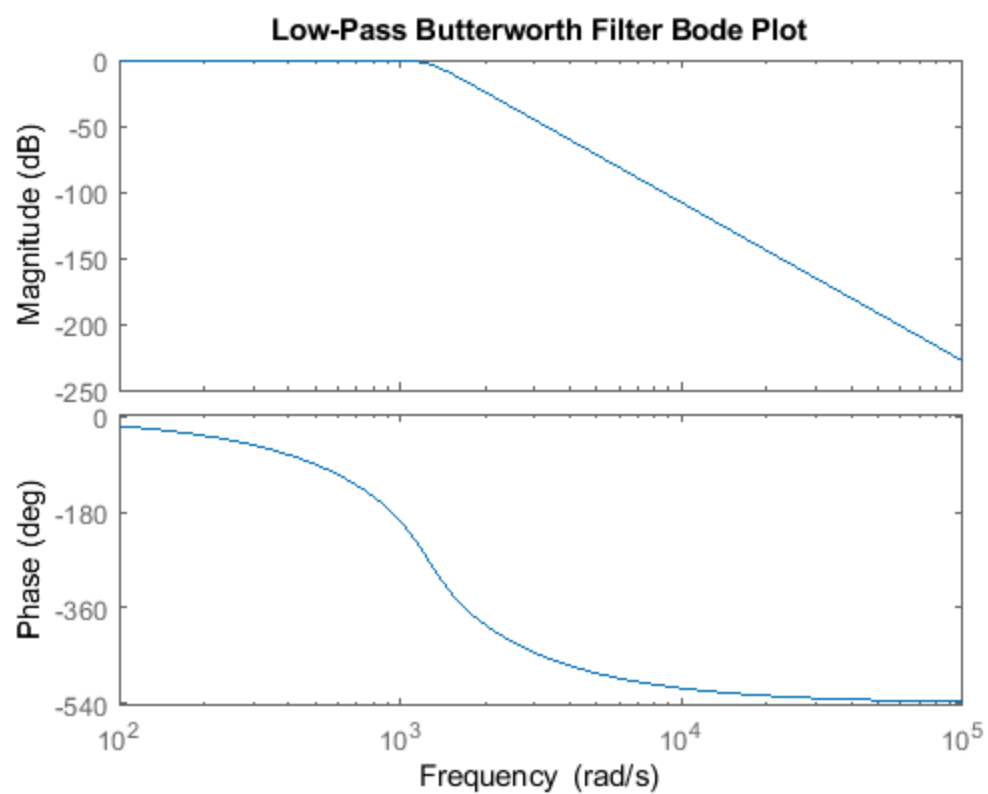
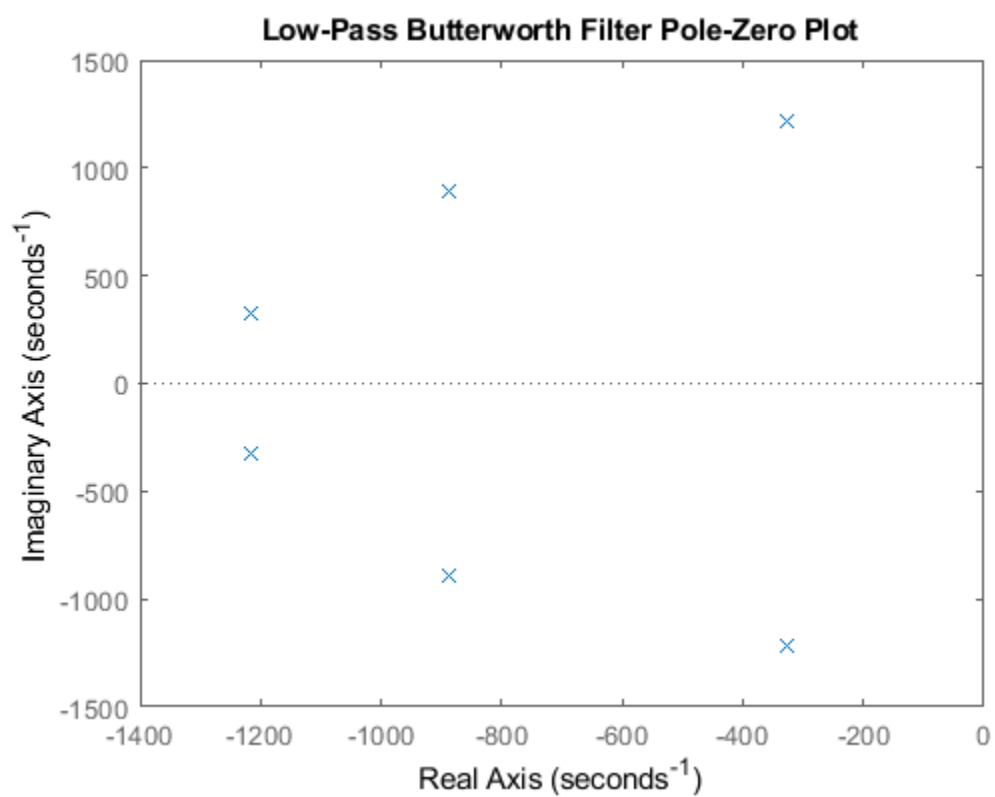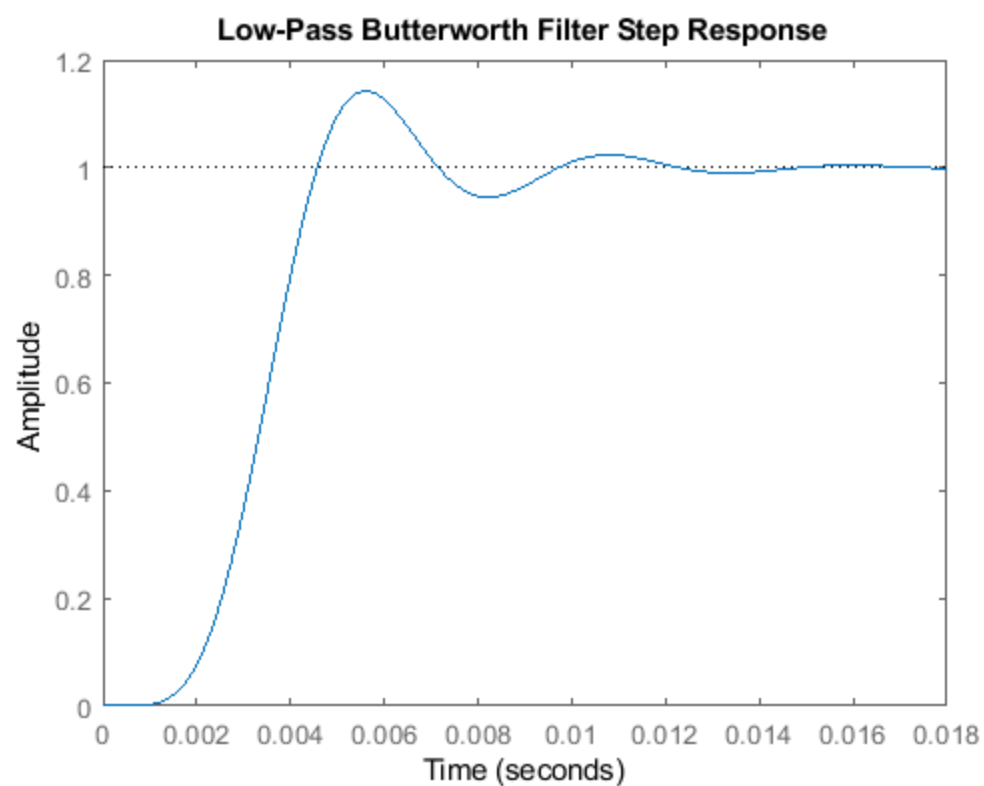   *2.536e-19 s^6 + 1.232e-15 s^5 + 2.992e-12 s^4 + 4.605e-09 s^3*

                                      + 4.726e-06 s^2 + 0.003075 s
  + 1

Continuous-time transfer function.

Low-Pass Butterworth Filter Bode Plot

Low-Pass Butterworth Filter Impulse Response

Low-Pass Butterworth Filter Step Response

Low-Pass Butterworth Filter Pole-Zero Plot

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