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%*****
%* Name: Nick Shiffer Date: 9/26/17 *
%* Seat: 11 File: APP_A15_1_.m *
%* Instructor: Dr Harper 10:20Am *
%*****
fprintf ('\n')
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fprintf ('\n* Name: Nick Shiffer Date: 9/26/17 *')
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fprintf ('\n* Instructor: Dr. Harper 10:20AM *')
fprintf ('\n*****')
fprintf ('\n')
%Use a loop to create volatege and time
%create summation variable
V = 0;
%loop counter variable
t=0;
%loop
for t = 0:1:400
    V(t+1) =3^(7-t/100);
    time(t+1)=t/10;

end
%Plot Data
figure
plot(time,V)
xlabel('Time (s)')
ylabel('Voltage (mV)')
title('Capacitor Dissipation Linear')

%Plot with semilogx
figure
semilogx(time,V,'o')
xlabel('log Time (s)')
ylabel('Voltage (mV)')
title('Capacitor Dissipation log(Time)')

%Plot with semilogy
figure
semilogy(time,V,'-')
xlabel('Time (s)')
ylabel('log Voltage (mV)')
title('Capacitor Dissipation log(Voltage)')

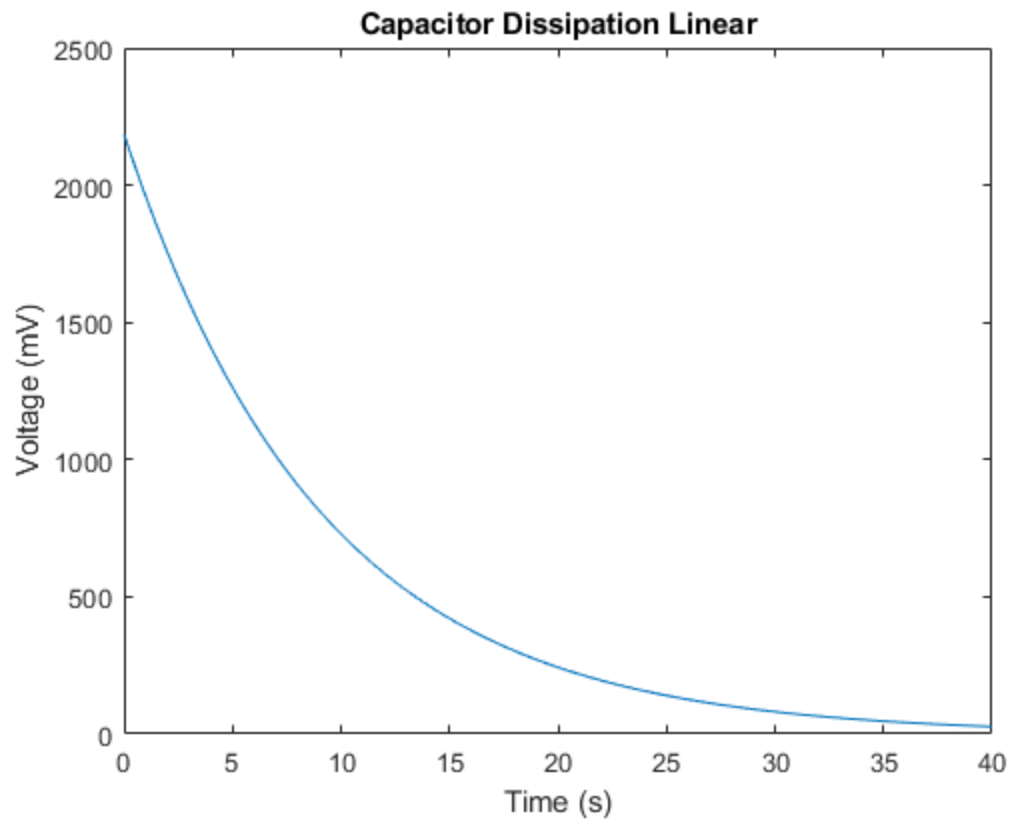
%Plot with loglog
figure
loglog(time,V,'*')
xlabel('log Time (s)')
ylabel('log Voltage (mV)')
title('Capacitor Dissipation log(Voltage) log(Time)')

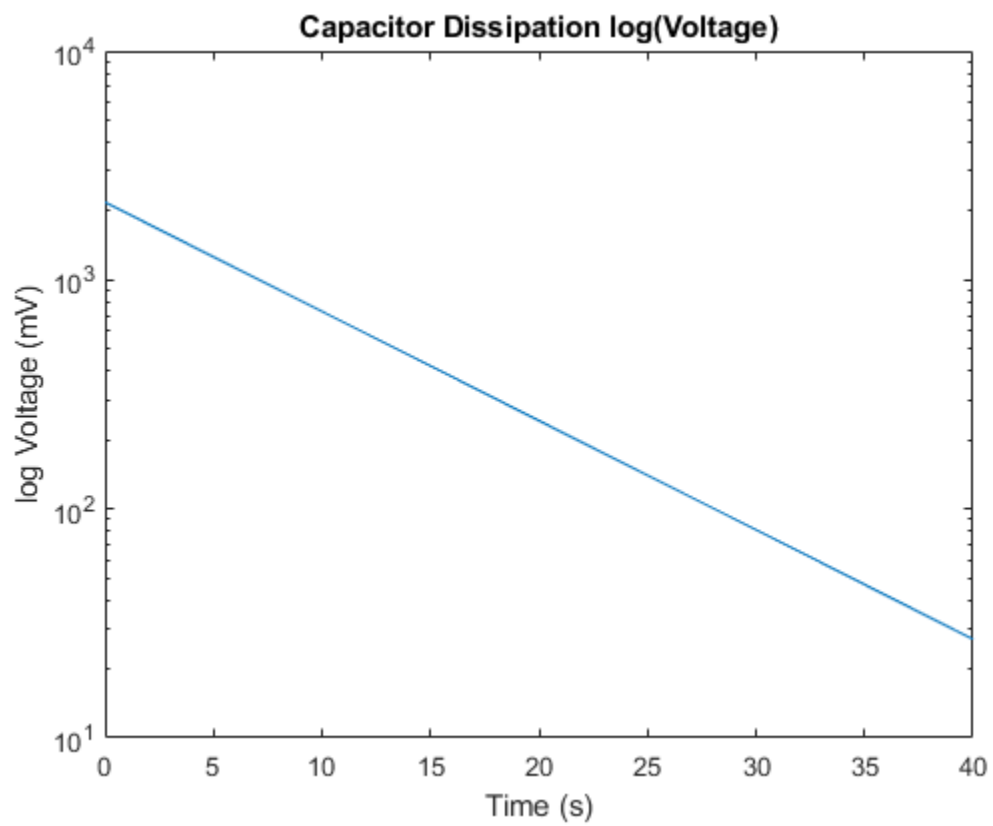
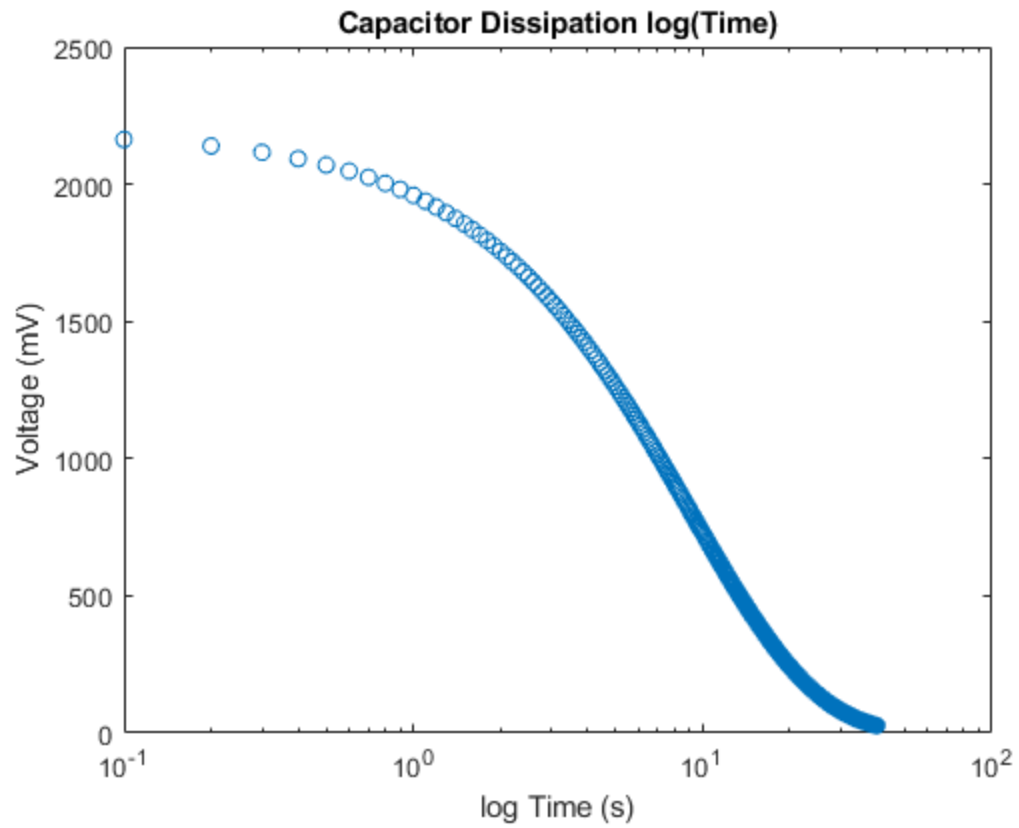
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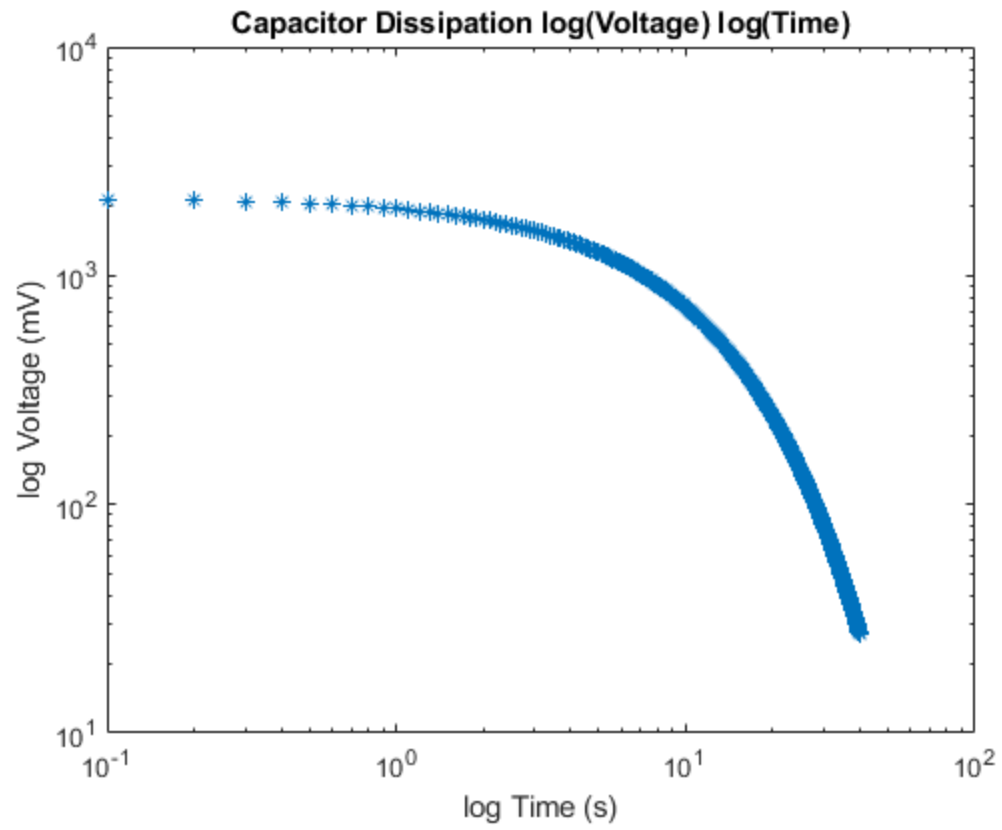
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