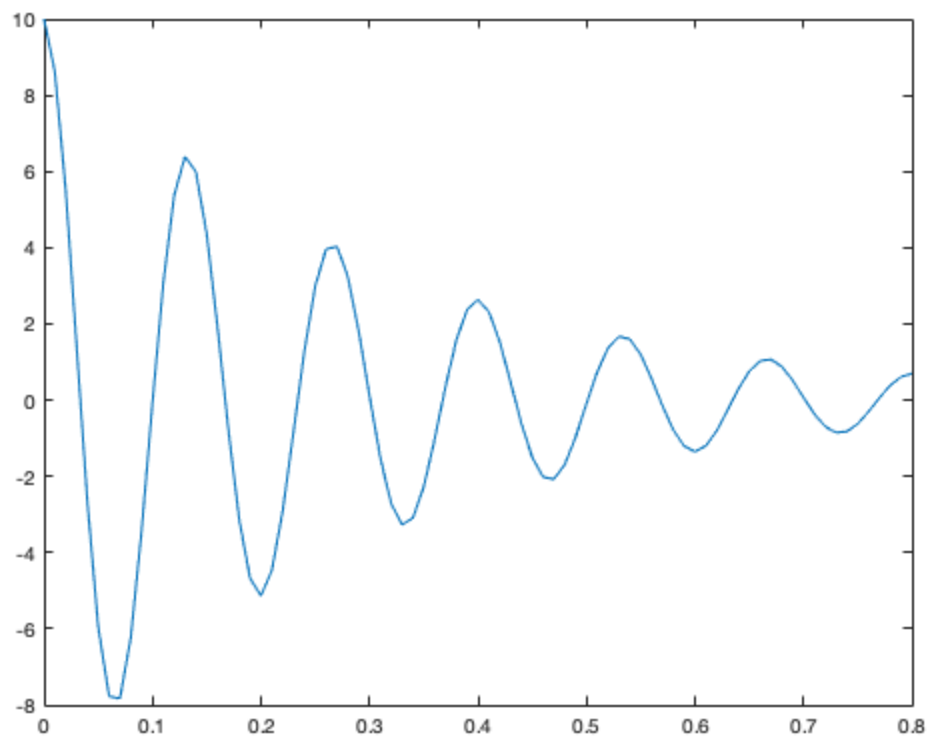```
%Azzan_Al Ismaili 2nd HW submission.
t = 0:0.01:0.8; %time
q0 = 10; %the initial charge
R = 60; %the resistance
C = 0.00005;
L = 9;%inductance
%charge on the capacitor q(t) as a function of time can be computed as
q_t = q0*exp(-R*t/(2*L)).*cos(sqrt(1/(L*C)-(R/(2*L))^2)*t);
plot(t,q_t)
```



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