

Ch_7_Lesson_7_Ex_1.m

```
clear

C = .2;
L = .5;
R=1;

dt = 0.1;
vc(1) = 5;
I(1) = 0;
t=0;
tt(1) = 0;

for i=2:101
    vc(i) = vc(i-1) + I(i-1)/C*dt;
    I(i) = I(i-1) - (vc(i-1)+I(i-1)*R)/L*dt;
    t = t + dt;
    tt(i) = t;
end

plot(tt,vc)
```