# ECEN 3714-----Network Analysis Cover Sheet for Lab 1 and Lab 2

**Spring 2022** 

Lab # 2

**Topic:** MATLAB

Completed by:

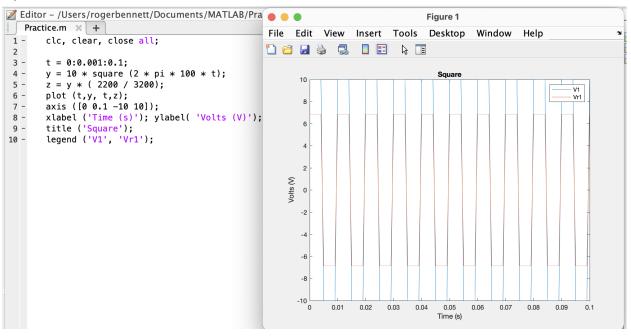
Last Name (Print): Bennett

First Name (Print): Roger

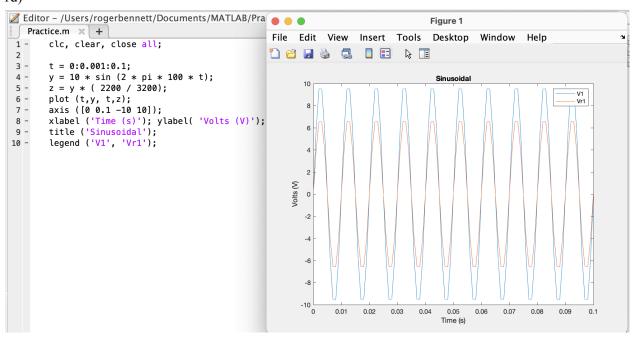
Name Roger Bennett (Signature):

# **Assignment 1:**

1c)

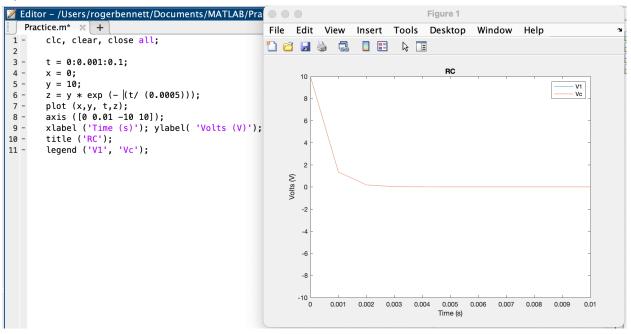


1d)

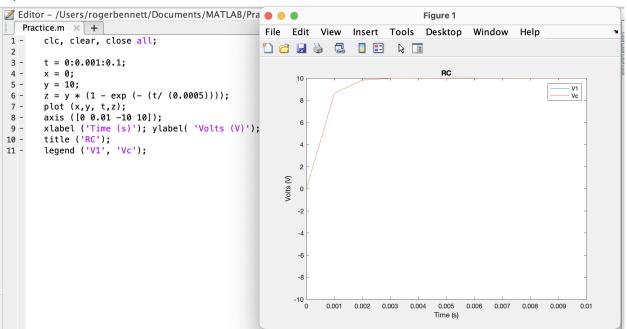


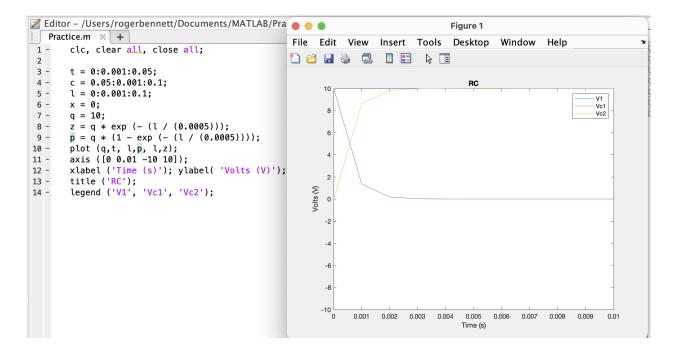
## **Assignment 2:**

#### 2a)

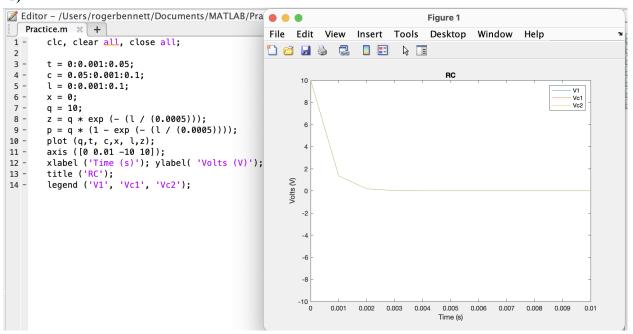


# **2b)**





## 2d)



# **Assignment 3:**

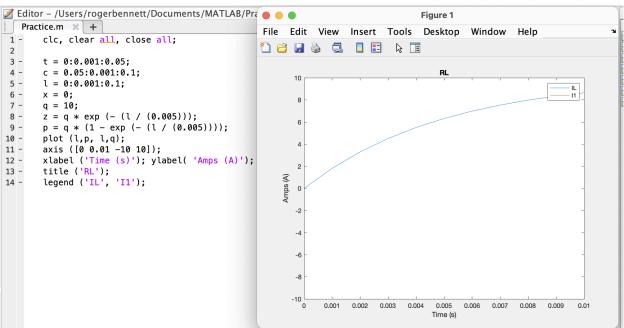
#### 3a)

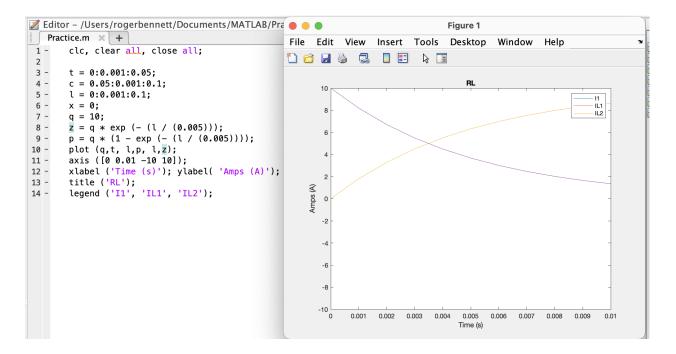
```
Z Editor – /Users/rogerbennett/Documents/MATLAB/Pr
Practice.m × +
                                                    File Edit View Insert Tools Desktop Window Help
       clc, clear all, close all;
 1 -
                                                    🖺 😅 🔒 🦫 🖫 🗎
       t = 0:0.001:0.05;
 3 -
                                                                                                    ▲ 월目 ● 电 Q ☆
        c = 0.05:0.001:0.1;
 4 -
 5 -
       l = 0:0.001:0.1;
 6 -
       x = 0;
 7 -
       q = 10;
 8 -
       z = q * exp (- (l / (0.005)));
       p = q * (1 - exp (- (1 / (0.005))));

plot (l,z, l,q);

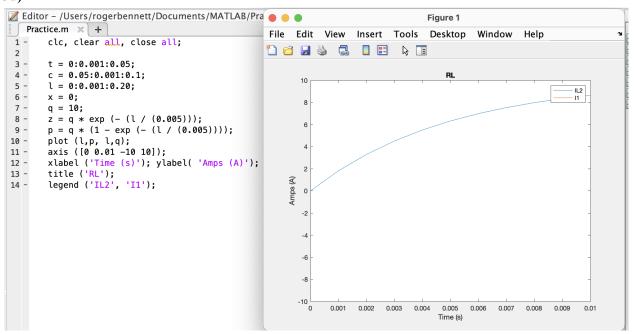
axis ([0 0.01 -10 10]);
 9 -
10 -
11 -
12 -
        xlabel ('Time (s)'); ylabel( 'Amps (A)');
        title ('RL');
13 -
                                                         Amps (A)
        legend ('IL', 'I1');
14 -
                                                           0
                                                                 0.001 0.002 0.003 0.004 0.005 0.006 0.007 0.008 0.009 0.01
                                                                                       Time (s)
```

# **3b)**





## 3d)



#### **Discussion:**

- ❖ I really enjoy coding so this lab was actually pretty fun.
- Understanding how the Capacitors, Resistors, and Inductors interacted within the circuit was familiar stuff.
- ❖ The hardest part was understanding the syntax of the code to do what I wanted it to do.
- ❖ For example figuring out what to plot to get the graph that I wanted or the time periods were the hardest for me to wrap my head around.