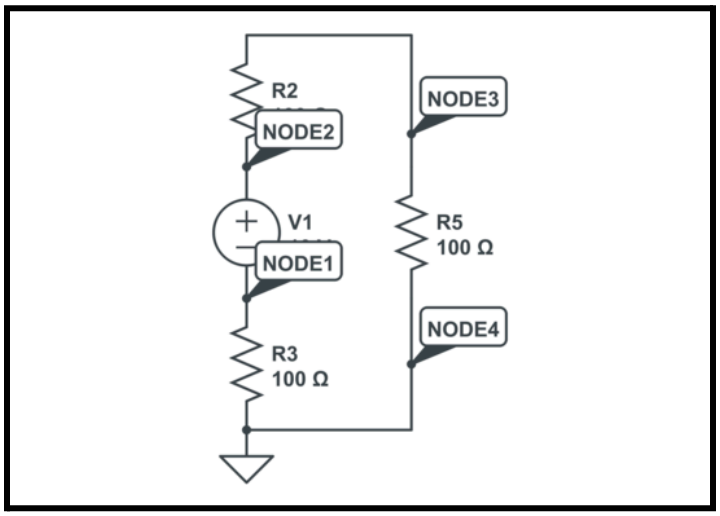
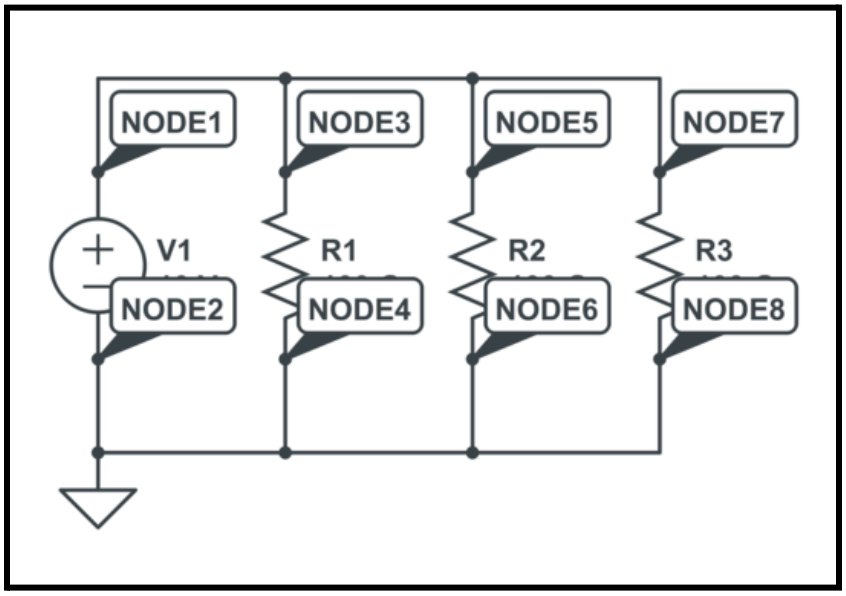
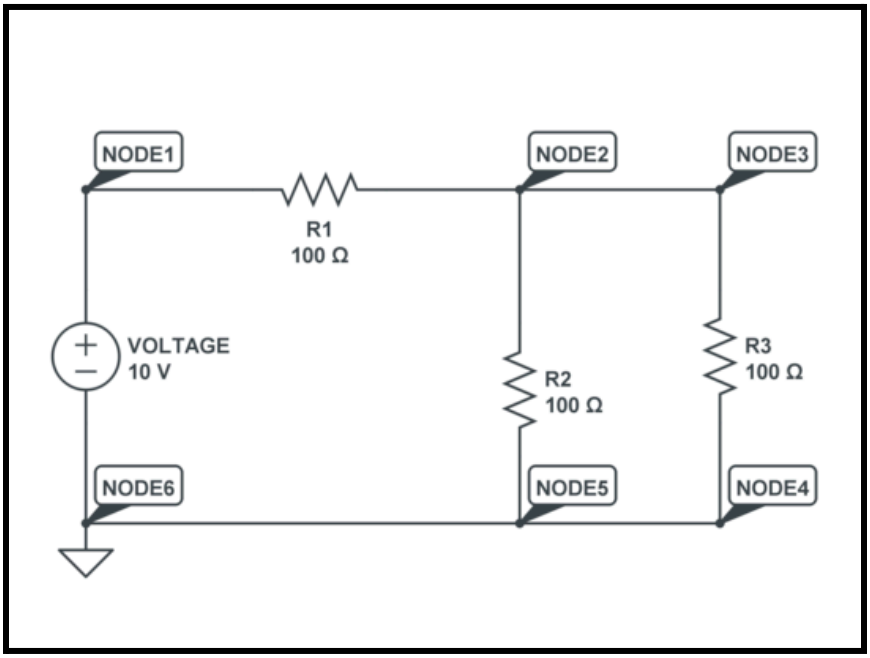
1. Resistors in Series
   c. Node 1 -5V, Node 2 5V, Node 3 0V, Current 50 mA
   d. Node 1 -3.33V, Node 2 6.67V, Node 3, 3.33V, Node 4 0V, Current 33.33 mA



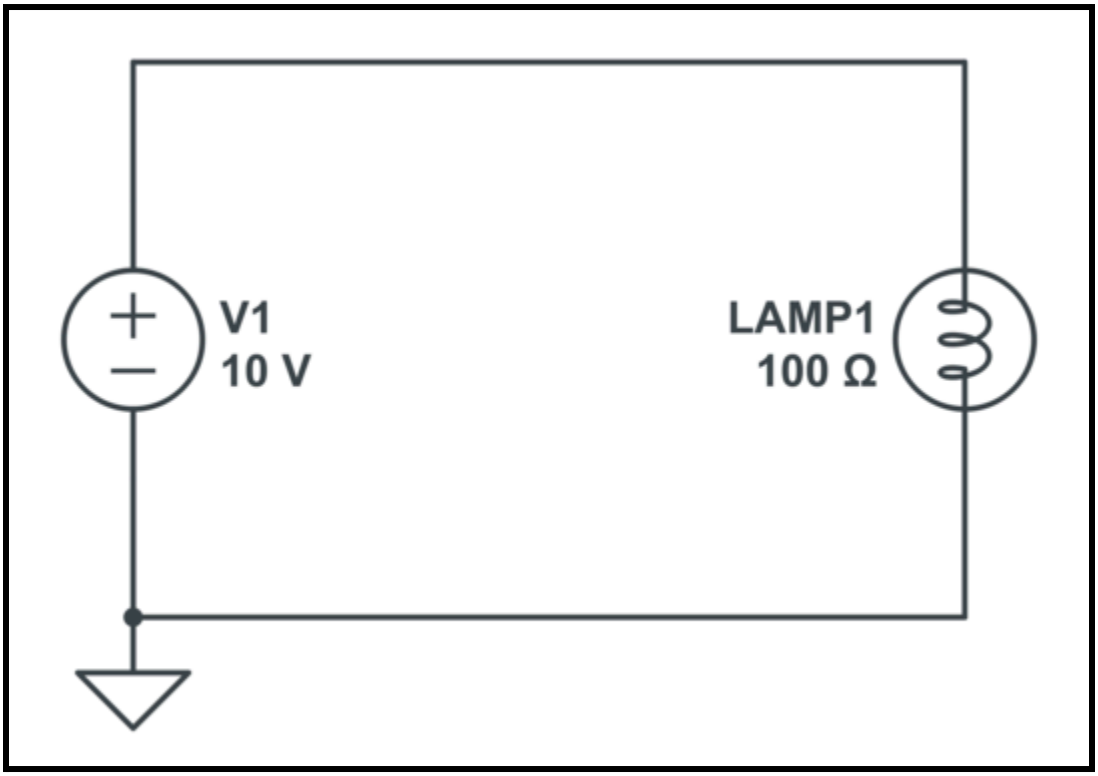
2. Resistors in Parallel
   c. Node 1: 10V and 200mA, Node 2: 0V and 200mA, Node 3: 10V and 100 mA, Node: 4 0V and 100mA, Node 5: 10V and 100mA, Node 6: 0V and 100mA.
   d. Node 1: 10V and 300mA, Node2: 0V and 200mA, Node3: 10V and 100mA, Node4: 0V and 100mA, Node 5: 10V and 100mA, Node 6: 0V and 100mA, Node 7: 10V and 100mA, Node 8: 0V and 100mA

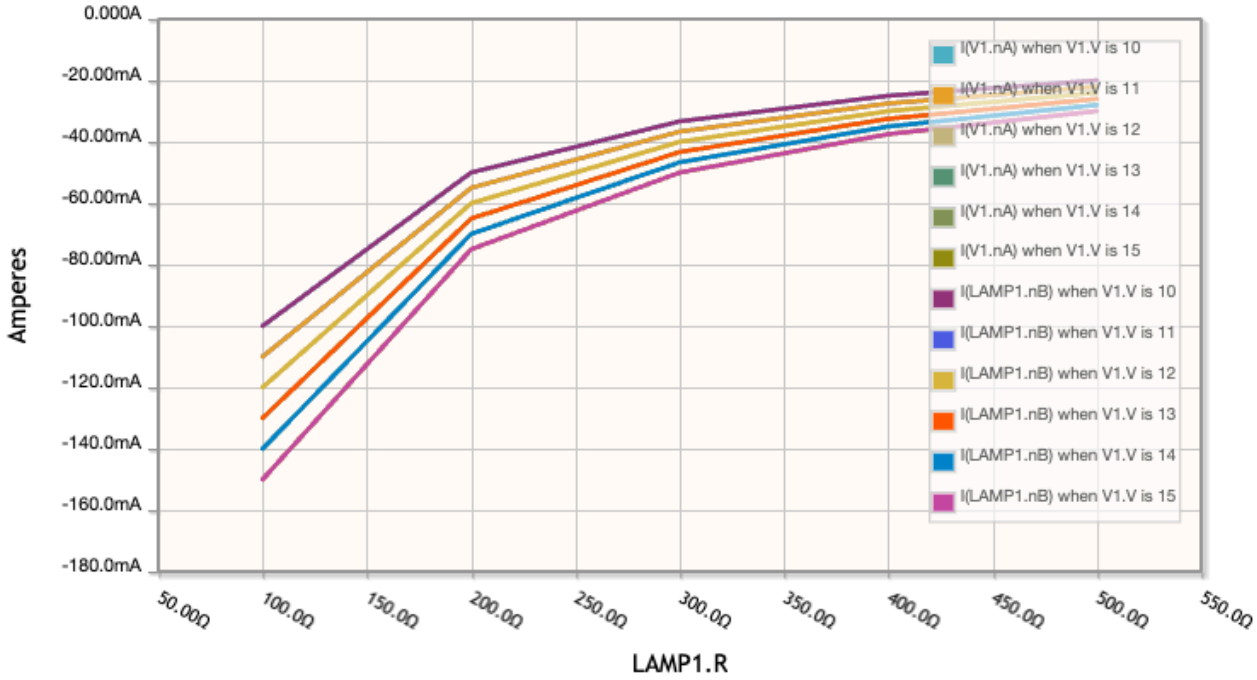


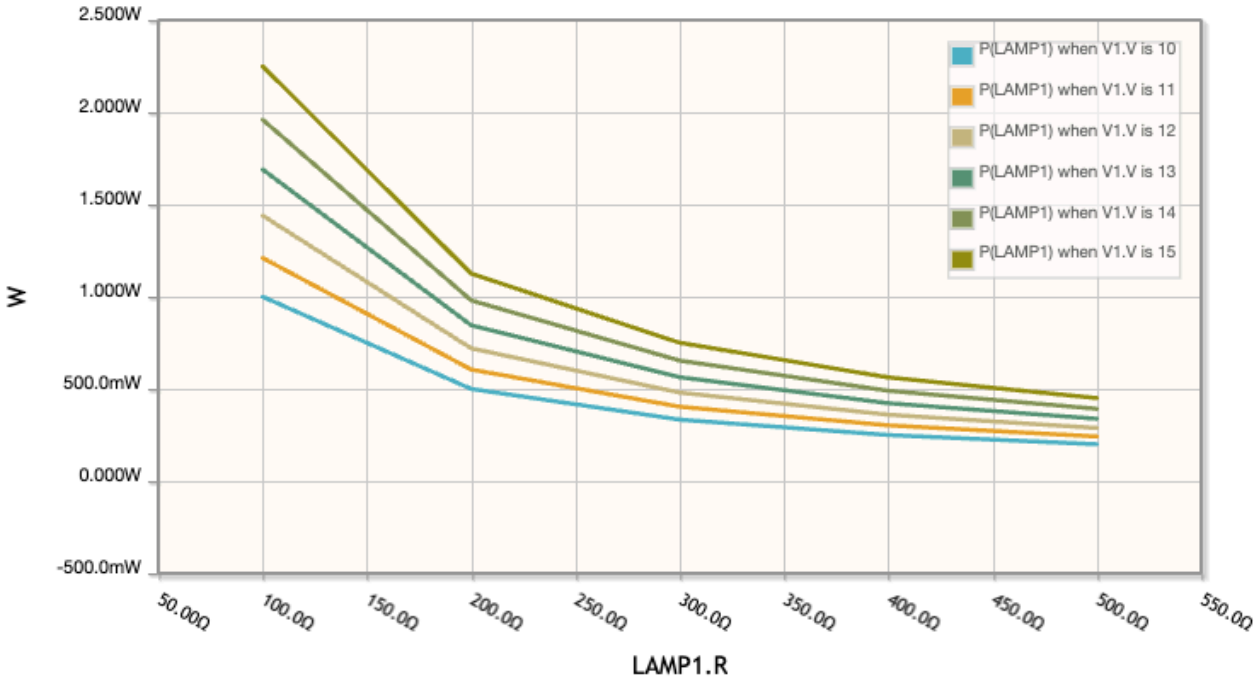
3. Resistors in Series and Parallel
    c. Node 1: 10V and 66.6 mA, Node 2: 3.33V and 66.6 mA, Node 3: 3.33V and 33.3 mA, Node 4: 0V and 33.3 mA, Node 5: 0V and 33.3 mA, Node 6: 0V and 66.6 mA.



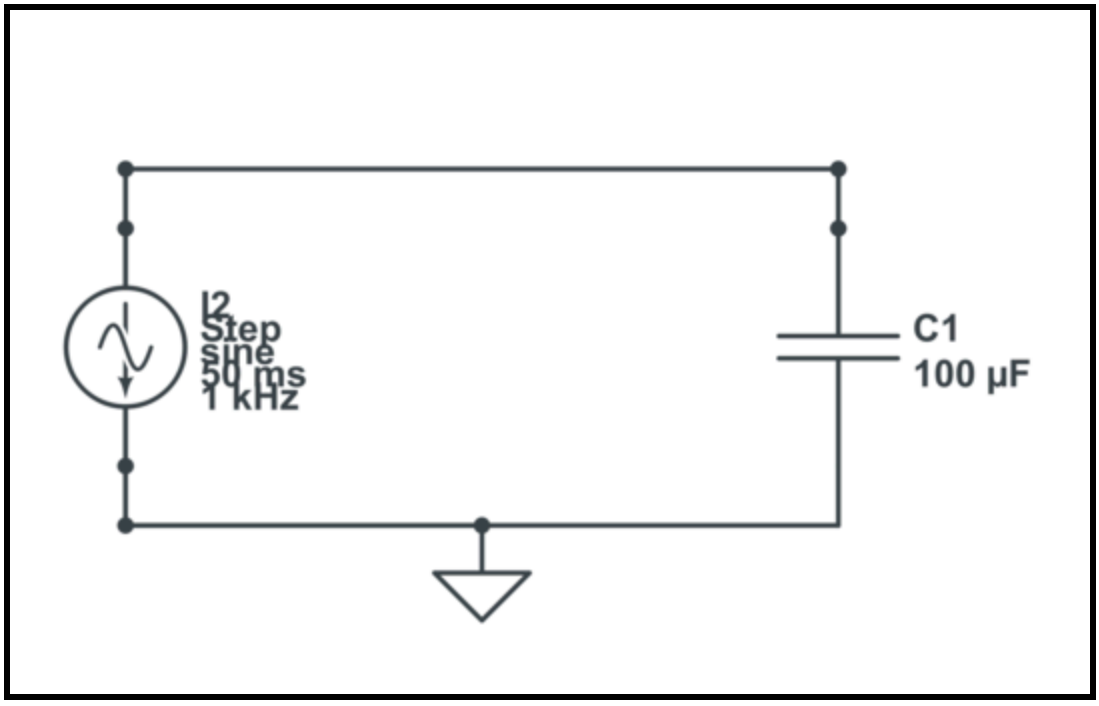
4. Powering Light Bulbs
    a. 1.0 W





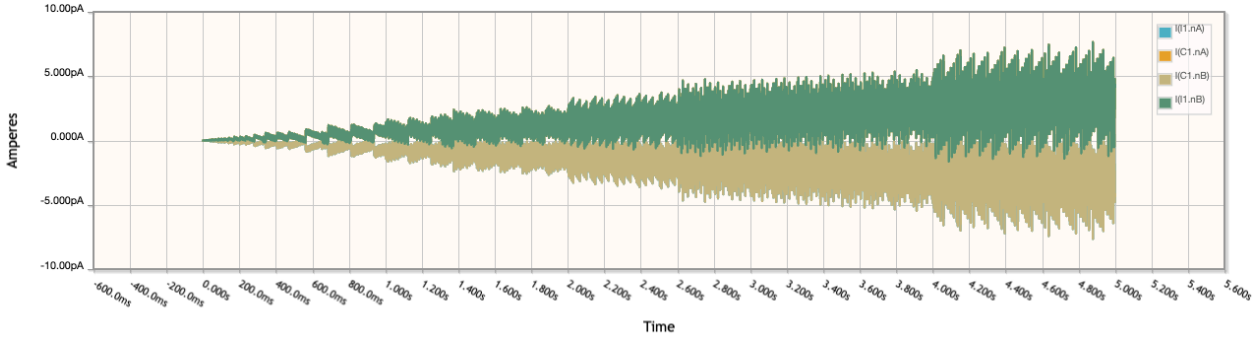


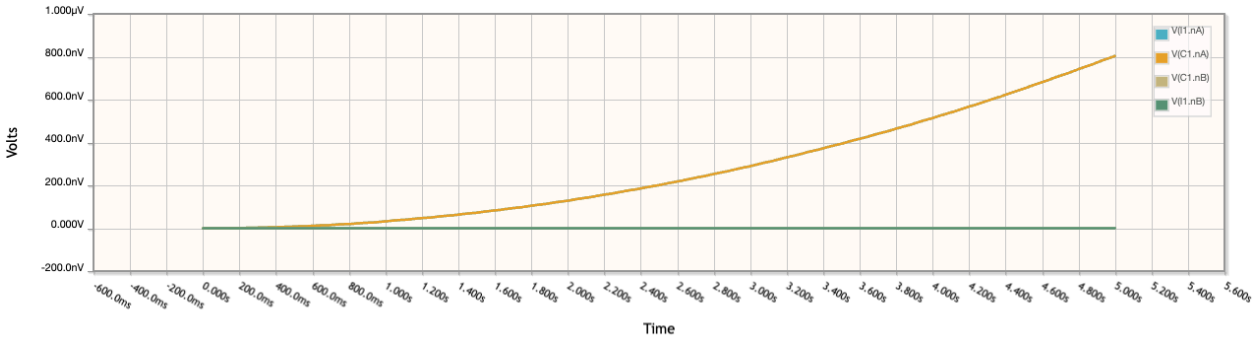
5. Capacitor Circuit
   Tried with several different values for the capacitor as well, saw similar trends different amounts, etc.



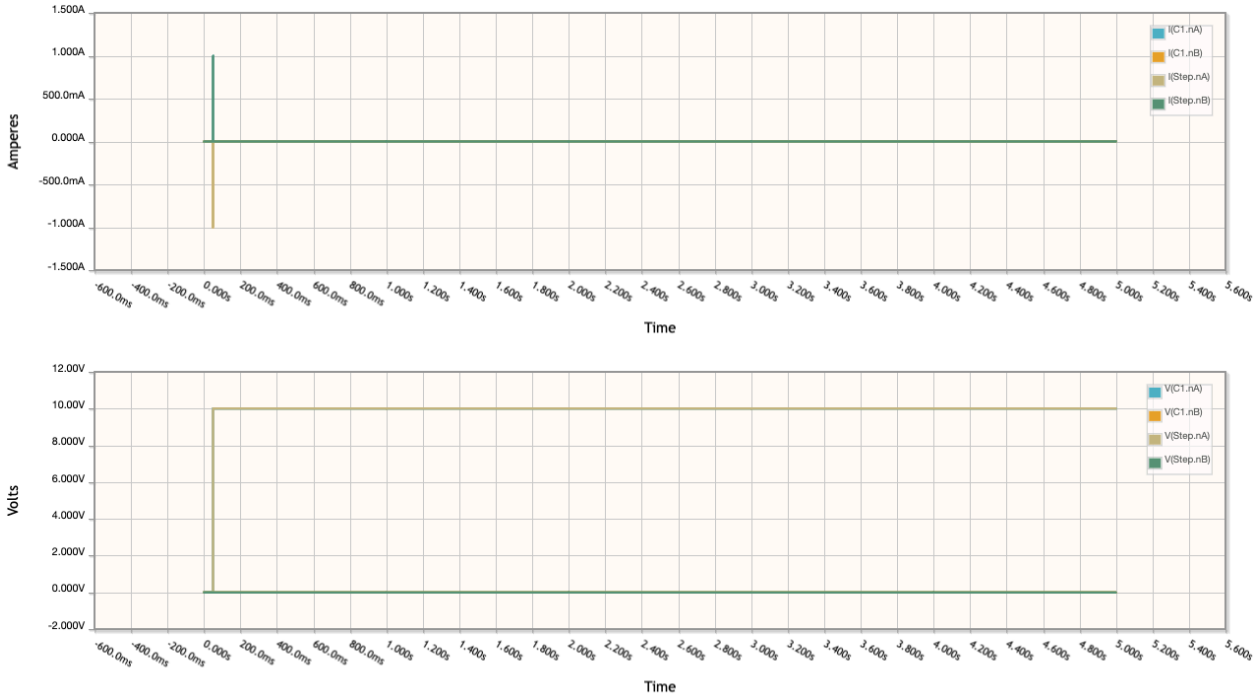
a.

For Sine:

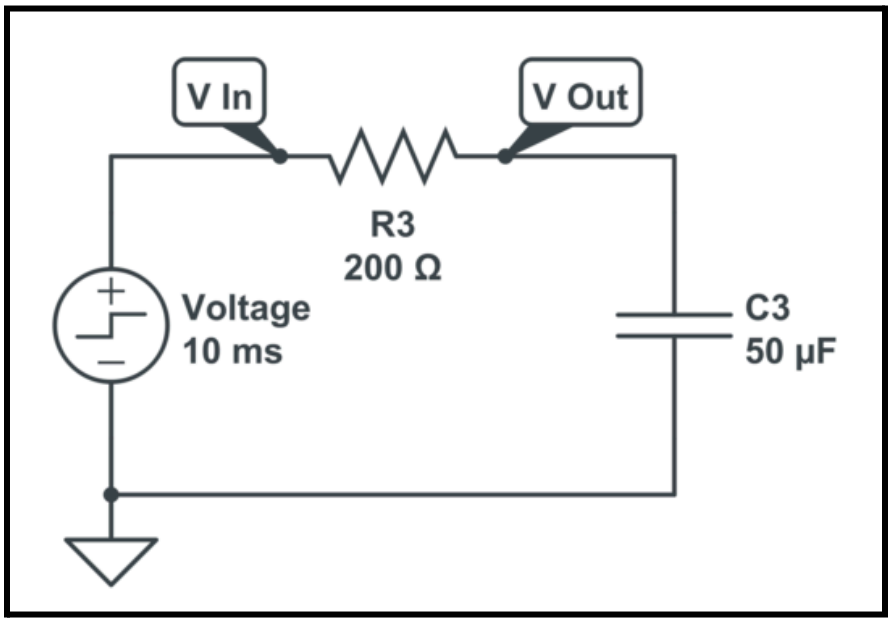


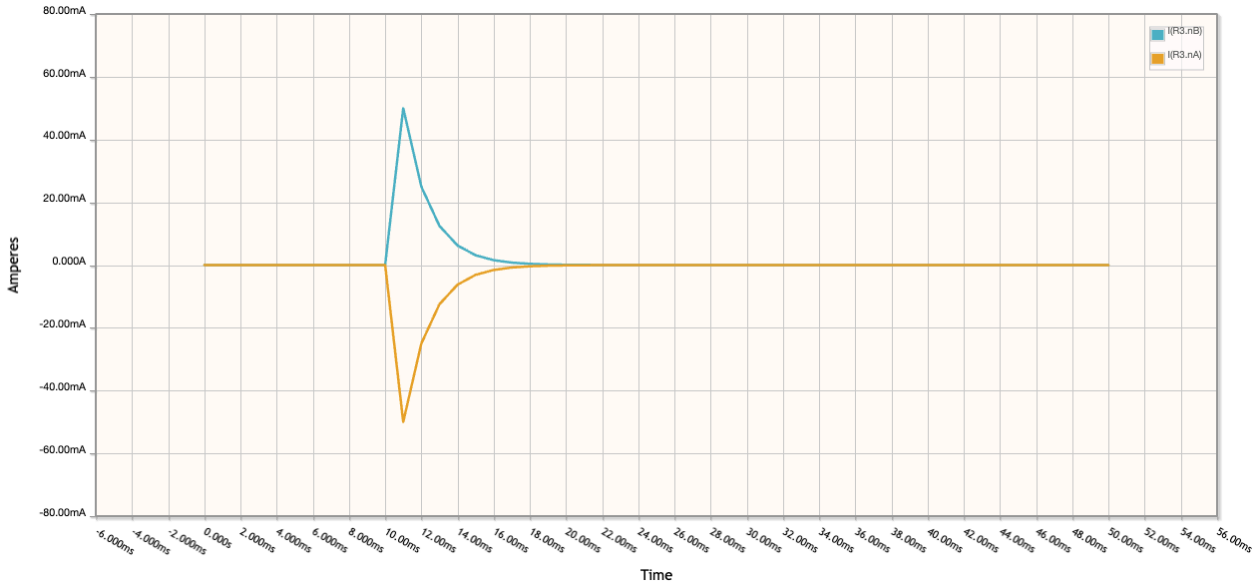


For Step:

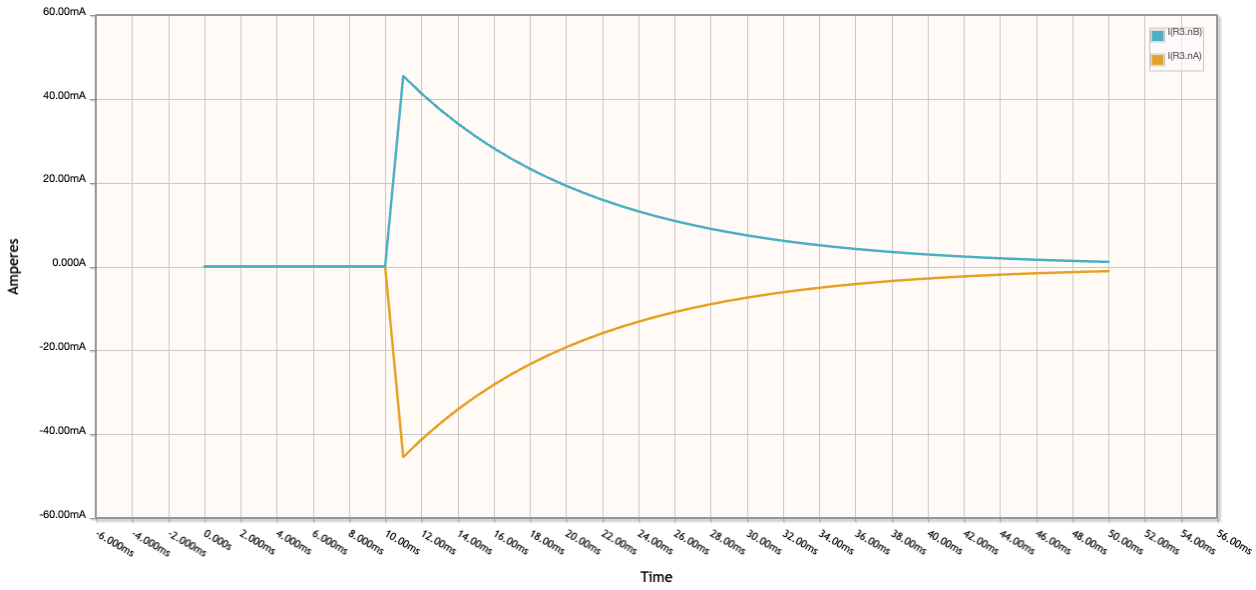

Amperes
1.500A
1.000A
500.0mA
0.000A
-500.0mA
-1.000A
-1.500A
I(C1.nA)
I(C1.nB)
I(Step.nA)
I(Step.nB)
Time
Volts
12.00V
10.00V
8.000V
6.000V
4.000V
2.000V
0.000V
-2.000V
V(C1.nA)
V(C1.nB)
V(Step.nA)
V(Step.nB)
Time

6. RC Circuit


V In
V Out
R3
200 Ω
Voltage
10 ms
C3
50 µF



100Ω Resistor and 10µF Capacitor



200Ω Resistor and 50µF Capacitor

7. RC Filter

a. Input voltage is 0V, output voltage is 0V.