# ELEC 1100 Laboratory 1: Summary Sheet

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Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student ID:

Lab Session (Deadline): LA1 (Wed 14:50) / LA2 (Thu 11:50) / LA3 (Mon 16:20)

**Notes**: (1) Show demo to your TA to have an attendance record; (2) Individually submit your completed Summary Sheet on Canvas before the deadline.

**Tinkercad Simulation Links (for online lab)**

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| **Simulation 1:** |  |
| **Simulation 2:** |  |
| **Simulation 3:** |  |
| **Simulation 4:** |  |
| **Simulation 5:** |  |

**Experimental Results and Analysis**

Q1: Write down the assigned resistor values for R1 and R2.

*R1: \_\_\_\_\_\_\_\_\_\_\_\_ R2: \_\_\_\_\_\_\_\_\_\_\_\_*

Q2: What are the values of Vs and Va?

*Vs: \_\_\_\_\_\_\_\_\_\_\_\_ Va: \_\_\_\_\_\_\_\_\_\_\_\_\_*

Q3: Calculate the voltage ratio and resistance ratio see if they match.

Q4: What is the purpose of using the resistor in the circuit?

Q5: Describe what happens after adding the capacitor. Explain briefly why this happens (explain the function of the capacitor).

Q6: From the oscilloscope, what is the value of each division on the voltage axis?

Q7: From the oscilloscope, what is the value of each division on the time axis?

Q8: From the oscilloscope, what is the period (time for the signal to repeat) of the signal?

Q9: What is the lowest frequency that you need to use to **avoid** the LED from blinking? (Give a rough number)

Q10: Determine the voltage drop across the resistor from the waveforms.