

Homework 4: Lab Report for Lab 7**Due: Friday, November 1, 2019 at 11:59pm**

For this homework assignment, you are to write up a lab report for what you did for Lab 7.

If you did lab 7 with a partner, you and your partner should submit a single lab report for this assignment. Submit as a PDF to GradeScope by 11:59pm Friday 11/1/19.

As a reminder: Lab 7 was to connect 2 Arduinos together and have them communicate using serial communication. Each Arduino is to be wired with one LED and one button. Pressing the button on one Arduino should toggle the state of the LED on the other Arduino.

The entire write-up for the lab can be found at:

https://www3.cs.uic.edu/pub/CS362/LabsF19/CS_362_Lab_7.pdf

The lab report should contain all of the information needed to re-create the working Arduino for the lab (code and wiring) plus a description of what/why the given code and wiring is needed.

This lab does not contain an experiment. So we will expand the discussion portion of the report.

The form of lab report should mimic the Tutorial pages from the Arduino web pages. The required sections are:

- Title
- Name and NetId
- Description of the Lab Assignment (paraphrase the write-up)
- Hardware needed (all pieces include wires, breadboard, Arduino Uno, etc)
- Circuit and Wiring
 - Written description of step-by-step wiring
 - Diagram (use of a Fritzing diagram is wonderful: <http://fritzing.org/projects/>)
- Schematics – Only needed if placement of resistors/components and types of resistors/components is not obvious in Circuit and Wiring section.
- Code used (include the entire code here)
- References (links to information used/useful for completing lab)
- Discussion
 - How easily did the two Arduinos communicate over Serial Communication?
 - Did wiring the two Arduinos identically make the lab easier or harder? Why?
 - Did running the same code on both Arduinos make the lab easier or harder? Why?
- Conclusion - Ideas/Thoughts/Lessons-Learned