

Laboratory Session 6

1.1 Pre-Laboratory Report

Complete this report before coming to the Laboratory Session

Due Date Week of October 4th-October 9th, 2021 in lab section. Submit report electronically before start of Lab via Blackboard (check assignments folder)

Format Follow the Pre-Laboratory Report Template found on Blackboard

Content Sections to be included in the Pre-Laboratory Report include

1. **Header**
2. **Problem Statement**
3. **Research & Investigation**
4. **Alternative Solutions**
5. **Optimum Solution (with flowcharts)**
6. **Sources/Works Cited**
7. **Code Attachments**

Additional Task Answer the following questions and include them in the Pre-Laboratory Report

- a. What is the function of the buzzer sensor module?
- b. Describe the purpose of the 3 pins of the buzzer sensor module (VCC, I/O, GND)

Additional Task Create flowcharts for the code you plan to generate in Laboratory 4

- a. Make 1 flowchart for the sample code that you have been provided in the Research & Investigation section
- b. Make 1 flowchart for your Optimal Solution
- c. You can use PowerPoint, or any other software, to create your flowcharts
- d. Your flowcharts should use simple English, not IC syntax
- e. Include the flowchart in the Optimum Solution section of your Pre-Lab report

1.2 Post-Laboratory Report

Due Date Week of September 6th-September 10th, 2021 in lab section. Submit report electronically before start of Lab via Blackboard (check assignments folder)

Format Follow the Post-Laboratory Report Template found on Blackboard

Content Sections to be included in the Pre-Laboratory Report include

1. **Header**
2. **Problem Statement**
3. **Research & Investigation**
4. **Alternative Solutions**
5. **Optimum Solution**
6. **Analysis & Testing**
7. **Final Evaluation**
8. **Sources/Works Cited**
9. **Code Attachments (as needed)**