This assignment consists of several questions for which you are to supply thoughtful and complete answers.

1. (10 points) If you call `eprintf()` many times in quick succession in a burst (not repeatedly) and the output becomes garbled, what is the likely cause and what is a way to fix the problem?

2. (10 points) Describe the two signals of the I2C bus.

3. (10 points) Explain the method of addressing various peripherals on an I2C bus.

4. (10 points) What advantage does the I2C bus have over the SPI bus?

5. (10 points) Describe the four signals of the SPI bus.

6. (10 points) Explain the method of addressing various peripherals on a SPI bus.

7. (10 points) What advantage does the SPI bus have over the I2C bus?

8. (10 points) Describe the difference between resolution and accuracy in an analog-to-digital converter.

9. (10 points) Describe what monotonicity is in a digital-to-analog converter.

10. (10 points) Why do mechanical switches need to be debounced?

This assignment must be emailed to tlupfer@sandiego.edu by midnight on Sunday, March 15th.

Provide answers to the questions in a Word document and make sure your name appears at the top of the document.

You should attach a single file named:

lastname05.docx

In other words, my file would be named *lupfer05.docx*.