Lab 4 grading sheet   Circle professor

1) Name Last_____ First_____ EID_____ AC, JV, RY

2) Name Last_____ First_____ EID_____ AC, JV, RY
Use same spelling as listed on Canvas

    1. Deliverables 20%:
        0) This sheet

Combine the following components into one pdf file and upload it to Git before your checkout time. Have this file open on the computer during demonstration.

        1) A screenshot showing the system running in simulation mode. In the screenshot, please show the dumped data in a memory window and the I/O window, as illustrated in the lab manual.

        2) Estimation of the execution time of your debugging instrument Debug_Capture

        3) Results of the debugging instrument (part e) and the calculation of the minimum and maximum elapsed time (ignore the first measurement, which will be wrong).

You must commit your software to GitHub

3. Performance 35%:
   Does it handle correctly all situations as specified?

4. Adhere to coding standard 5%
      Good Names have meaning, Variables have units in comments
      Consistent indentation, Consistent style

5. Data Interpretation (20%):   1)   2)
 Explain what the collected data means

                                                1)   2)

6. Demonstration (20%):

You will show the TA your program operation on the simulator or the actual TM4C123 board. The TA may look at your data and expect you to understand how the data was collected and what the data means. Also be prepared to explain how your software works and to discuss other ways the problem could have been solved. How did Texas_Init affect the calculations in your delay function? What would the calculations be if Texas_Init was not called? You will be asked to create a breakpoint, and add the port pin to the simulated logic analyzer. Is **Debug_Capture** minimally intrusive or non-intrusive? What do you mean by intrusiveness? Is your code "friendly"? How do you define masking? How do you set/clear one bit in without affecting other bits? What is the difference between the **B**, **BL** and **BX** instructions? How do you initialize the SysTick? You should understand every step of the function **SysTick_Init**. How do you change the rate at which SysTick counts? Describe three ways to measure the time for a software function to execute? If you used 32-bit data for **DataBuffer** instead of 8-bit, how would the intrusiveness change? Could you have stored the time-stamp data in 8-bit, 16-bit, or 24-bit arrays? Why does the pointer to the time-stamp array need to be incremented by four, if you want to point to the next element in the array? How do you allocate global variables?

                                            1)   2)

                     Total: