1. What is hysteresis and how does it help prevent bad behavior on digital inputs?
    a. Hysteresis changes the voltage threshold depending on the currently detected digital state. This makes it impossible for a signal to consistently hang around the trigger point
2. What is quantization?
    a. the process of mapping a high-resolution signal to a manageable lower-resolution one.
3. What does Nyquist theory explain? What is the problem with sampling a signal too slowly?
    a. the relationship between how often you sample an input signal and whether or not you'll be able to tell what it is afterwards. If you sample too slowly you will miss information
4. The maximum resolution of the ADC is 12-bits. How many quantization steps/values does this give us?
    a. 4096
5. What are the steps to perform an ADC calibration?
    a. Calibration can only be performed when the peripheral is stopped, don't set any enable/start bits (other than in the RCC peripheral) before attempting to start a calibration process.
6. What's the difference between right and left-aligned data in the DAC registers?
    a. The left-aligned mode is typically used for selecting the upper bits of a 16-bit number, allowing the DAC to act on 16-bit data without any conversion or shifting. (with some minor loss in precision provided by low-order bits)
7. What DAC register would you use to write 8-bit right-aligned data? (use the peripheral reference manual)
    a. DAC_DHR8Rx
8. Name something you found confusing or unclear in the lab manual. If everything was clear,simply answer that you didn't have any issues.
    a. N/A