

Prelab for Lab #6: Stepper Motor in Assembly

Week of 7 March 2022

Pre-lab

Part A – Textbook Readings / Videos

1. Textbook Chapters 7 and 8 to review assembly language and the stack.
2. Textbook Chapter 16 if you need a review of stepper motors.

Part B – Prelab assignment

Interfacing the stepper will be the same as your Lab#5 code, but in assembly.

Questions

1. What assembly language instruction is used to call a function in ARM Thumb2 assembly?
2. What assembly language instruction is used to return from a function in ARM Thumb2 assembly?
3. With the standard ARM EABI, what register is used to pass a single 32-bit integer argument to a function?
4. If your function is not a leaf function (meaning it calls another function) what must you do with your link register (LR) before calling the other function?