Lab 3-2 part 2 Pseudo Code

# Main

compiler directives

declare global variables

define global constants

function prototypes

main function

Initialize system, ports, and PCA

Print beginning message

Begin infinite loop

If 40ms has passed

Read compass

Print bearing

End infinite loop

End main function

# PCA Interrupt Service Routine

If the counter overflow flag is set

Clear the flag

Set PCA0 to the value that corresponds to 20ms

Increment overflow counter

Clear all other PCA interrupts

End ISR

# Read Compass

Initialize local variables

Read 2 bytes of i2c data from the compass address, starting at register 2

Combine the high and low bytes

Return the value

End Read Compass