EE 308 Lab Spring 2009

EE 308 – LAB 3

C Language Programming, Interrupts and Timer Hardware (Week 1)

Pre-Lab

- 1. Write C code to read Port H and mask out all but the two least significant bits.
- 2. Write a C subroutine to take an eight-bit number and find its gray code equivalent.
- 3. Write a C function to find the next pattern of a Johnson counter from the current pattern.
- 4. Write C code to implement the TBird style turn signal. Put the pattern into a table in memory, and use a variable to hold the index of the pattern to display. Increment this index to find the next pattern to display, and reset the index to zero when you reach the end of the table.
- 5. Integrate the above into the C program for Week 1 of Lab 3.