This lab project has the same submission (demo + report) requirements as the previous projects. The scope of this project involves the following .c source code files:

S1. *Nesting.c* for single-vectored interrupt nesting. Note that the “ei” MIPS instruction may need to be removed and the ISR heading be revised to __ISR_SINGLE to support later (> V1.6) X/C32 compilers.

S2. *Multiple.c* for multi-vectored interrupts. As discussed in the class, try keeping and removing the “ei” instruction call and observe the execution/performance of your code.

S3. *Clock.c* for a single-vectored interrupt “hour clock” application using MPLAB SIM and PORTA.

S4. (Optional) *Clock32k.c* for a variation of Item S3 using a secondary oscillator. Try with the PIC32 hardware attached since the internal MPLAB SIM simulator may not emulate this oscillator.

S5. (Optional) *Clockrtcc.c* for using the on-board real-time clock and calendar module.