

SER 250 Project 4: Pardon the Interruption

Learning Objectives:

- Implement an interrupt service routine in a program containing existing functionality

The Task

In this project, you will be adding an interrupt service routine (ISR) to an existing program. The program is already fully functional hexadecimal counter that shows the current counter value on the seven-segment display. You will use the timer to generate an interrupt every x cycles (where x can be between 100 and 200 cycles). Your ISR needs to do the following things:

1. Toggle all eight LEDs (i.e. if they are all off, they should all be turned on and vice versa)
2. Reenable timer interrupts

No changes should be made to the existing *main* loop or *sseg_display.asm*. Code should only be added following the *TODO* comments.

Deliverables:

1. Take the Advanced Topics Quiz on Blackboard (4 point)
2. Take the Project 4 Pre Quiz on Blackboard (3 points)
3. Submit your program on Blackboard with the format: *lastname_project4.plp* (16 points)
Note: Please do not zip the project file or include any additional files in your submission
4. Take the Project 4 Post Quiz on Blackboard (2 point)