

CMPE1250 – RTI Library and Blocking Delays

By now you should have a functional RTI library with a blocking delay function.

Create a new project for this ICA that includes PLL, RTI, and switch/LED support.

Tier 1

Add the code necessary so that the red LED toggles every 10ms if no switches are being pressed.

If the up switch is being pressed, toggle every 8ms.

If the down switch is being pressed, toggle every 12ms.

How do you resolve the situation where the up and down switches are both being pressed?

Tier 2

If the left switch is being held down, have the red LED be on for 1ms, and off for 9ms.

This switch overrides the behavior of any previous tier.

Tier 3

If the right switch is being held down, have the red led be off, and the green LED be on.

This switch overrides the behavior of any previous tier.

NOTE: All PLL, RTI, and switch/LED functionality must come from your supporting libraries. You may not have any code in the main file that directly operates these elements.