Spring 2022

CSE 411: Embedded Systems
Lab. 5: Adding Muliplte Tasks

Goals of this Lab:
- Create multiple tasks
- Adding the Idle Task for the freeRtos

Task 1: Idle Task:
- When the OS is not doing any task, it falls back to this task when there are no tasks being executed at the time
- Start by adding #define configUSE_IDLE_HOOK in the FreeRTOSConfig.h, this will allow the idle task hook.
- Write the Idle Task function according to the following prototype:
    - void vApplicationIdleHook();
- In the Idle task, toggle the blue LED
- This task would be the same as the other tasks but you will not need to add xTaskCreate

Task 2: Task Creation

- Start by enabling all LEDs on
- Create 2 tasks that has the same priority
- Task 1 shall toggle red LED only - 1000 ms
- Task 2 shall toggle green LED only - 2000 ms
- Draw the expected time line for the tasks
- Draw the observed time line for the LEDs