Write a program to blink the 3 onboard USER LEDs based on the following specifications:

- LED1 (Green) must blink 1 time per second (500 msec ON, 500 msec OFF, and so on)
- LED2 (Blue) blinks 2 times per second
- LED3 (Red) blinks 4 times per second
- Do not use any prebuilt high-level functions. Like what you learned in class, write your program in a register level abstraction.
- Add comments to each line in your code.
- Only submit your work (should be a single file for this lab)

Recommendation:

1. Find out to which pin/port are LED1/2/3 connected to. (Need to look in the board docs, or pinout excel sheet)
2. Write your own *delay_ms* function which takes a single *uint32_t* parameter (*val*) that delays CPU by <val> milliseconds. E.g., *delay_ms(500)* will delay CPU 500 msec. This function will be used in future labs.

OPTIONAL:

- In debug mode, make sure to pause the CPU somewhere in the code after initializing the LED pin. As you change the ODR value to toggle the LED, check if the GPIOx->IDR register is changing as well. Figure 37 in page 440 in the reference manual in blackboard will help you understand that behavior.
- One way to set output data for a digital pin is by using GPIOx->ODR. Check the GPIO registers (Page 458 in the reference manual) for another (more efficient) way to change output data.
- What other capabilities or features can you find for a digital in/out pins?