**CG2271 lab 7 Report**

**Q1.** What is the default priority level at which the led\_green\_thread is created?

The default priority for green led is osPriorityNormal

**Q2.** What are the highest and lowest priority levels that can be assigned to a task?

The lowest priority is osPriorityNone and the highest priority is osPriorityRealTime7. osPriorityNone has a value of 0 and osPriorityRealtime7 has a value of 48+7 = 55.

**Q3**. State your observation. Explain why you see such a behaviour.

We observed that only the red led will light up as the priority is set as osPriorityNormal1 which is higher than the green led which is osPriorityNormal. osPriorityNormal has a value of 24 while osPriorityNormal1 has a value of 24+1=25.

**Q4.** Describe your observation. Explain why it is as such.

The led blinks from red->off->green->off periodically. Mutex ensures a mutually exclusive access to a shared object and ensures that only one thread of execution can have access at any point of time. It also is affected by priority. Since LED RED thread has a higher priority than LED GREEN thread, it will run the red thread and blink red first, then run the green thread and blink green.

**Q5.** Describe your observation. Explain why it is as such.

The led blinks from red->off->green->off and never blinks again. This is observed as the osMutexRelease(myMutex) is never released and thus, the program keeps waiting for the green\_led\_thread to release the thread but since it does not, the program does not run anything.