Lab6 alternative assignment
ECE3073 – Computer Systems
Monash University Malaysia

Using any of the example codes discussed in the lecture. write suitable codes (editing suitable example codes) to perform following RTOS program with requirements described in points (a) to (d).

(a) Enable Start Task (priority 5) to create FIVE numbers of tasks (Task 1, Task 2 , Task 3, Task 4, and Task 5) with priority of 11 , 12, 13,14 and 15 , respectively. All task has sleep time of 2 seconds. Print the statements : "Task n Here" , where n stands for task number (1, 2,3, 4, 5) from respective Task functions.

(b) Declare a global integer `int Globalvalue`; All the task now will increment and decrement this variable by 1. That means at end of task function the value will be 0.

(c) Include suitable codes in Start Task to create semaphore , and further include semaphore codes such as `OSSemPend` and `OSSemPost` in all the 5 tasks and ensure the increment and decrement of global variable happens within a critical region, and when exiting the task function the Globalvalue remains at 0.

(d) Use suitable printf statements to show the output of (c)

Screen capture your results and post the same in provided links.