## \\ecfile1.uwaterloo.ca\e2adam\My Documents\GitHub\MTE241\_RTOS\src\\_threadsCore.h

```
THREADSCORE H
2
3
     #include <stdint.h>
 4
    #include <stdio.h>
5
    #include <LPC17xx.h>
6
    #include <stdbool.h>
8
    //function prototypes
    uint32 t* getMSPInitialLocation (void); //obtains the initial location of MSP by looking it up in the
     vector table
10
11
    uint32 t* getNewThreadStack (uint32 t offset); //returns address of new a PSP with offset of "offset"
    bytes from MSP.
12
13
    //void setThreadingWithPSP (uint32_t* threadStack); //sets the value of PSP to threadStack and ensures
     that the microcontroller is using that value by changing the CONTROL register
14
15
     void idleThread(void); //thread function for the idle thread
16
    int osThreadNew(void (*fun_ptr)(void), int deadline, int period); //initializes the thread stack and
17
    its initial context in memory
18
19
     #endif
```