Task Utilities

- pcTaskGetName(task handle)
- uxTaskPriorityGet (task handle)
- eTaskState mystate;
- mystate = eTaskGetState(mytaskHandle1);
- uxTaskGetNumberOfTasks()
- vTaskList(mytasklist)
- uxTaskGetStackHighWaterMark(mytaskHandle2)

```c
#include<stdio.h>
#include<FreeRTOS.h>
#include<task.h>

TaskHandle_t mytaskHandle1 = NULL;
TaskHandle_t mytaskHandle2 = NULL;

void mytask2(void* p)
{
    static char mytasklist[300];
    while (1)
    {
        printf("\nWelcome to KJSCE from Task2: ");
        printf("Name of my task2 is %s\r\n", pcTaskGetName(mytaskHandle2));

        printf("The priority of task2 is %d\r\n", uxTaskPriorityGet(mytaskHandle2));
        eTaskState mystate;
        mystate = eTaskGetState(mytaskHandle1);
        printf("\nState of task 1 is  %d\r\n",mystate);
        mystate = eTaskGetState(mytaskHandle2);
        printf("\nState of task 2 is  %d\r\n", mystate);

        printf("Number of tasks running %lu\r\n", uxTaskGetNumberOfTasks());
        vTaskList(mytasklist);
        printf("\ntasks running in foreground or background \n%s\r\n", mytasklist);
        printf("Status of task2 %lu\r\n", uxTaskGetStackHighWaterMark(mytaskHandle2));
        vTaskDelay(pdMS_TO_TICKS(1000));

    }
    fflush(stdout);
}
void mytask1(void* p)
{
    printf("Name of my task1 is %s\r\n", pcTaskGetName(mytaskHandle1));
    printf("The priority of task1 id %d\r\n", uxTaskPriorityGet(mytaskHandle1));
    vTaskSuspend(mytaskHandle1);
    while (1)
    {
        printf("\nWelcome to KJSCE from Task1 ");
        vTaskDelay(pdMS_TO_TICKS(100));
    }
    fflush(stdout);

}
void main_blinky(void)
{
```

```
    xTaskCreate(mytask1, "LED", 128, (void*)0, 1, &mytaskHandle1);

xTaskCreate(mytask2, "BUZZER", 128, (void*)0, 3, &mytaskHandle2);
vTaskStartScheduler();
    while (1)
    {
        printf("My idle task");
        //no work
    }
}
```

```
State of task 1 is  3

State of task 2 is  0
Number of tasks running 4

tasks running in foreground or background
BUZZER              X       3       125     2
IDLE                R       0       67      3
Tmr Svc             B       6       137     4
LED                 S       1       125     1

Status of task2 125

Welcome to KJSCE from Task2: Name of my task2 is BUZZER
The priority of task2 id 3

State of task 1 is  3

State of task 2 is  0
Number of tasks running 4

tasks running in foreground or background
BUZZER              X       3       125     2
IDLE                R       0       67      3
LED                 S       1       125     1
Tmr Svc             B       6       137     4

Status of task2 125
```