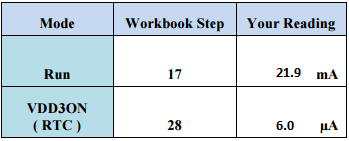
**Low Power Lab**

**Links to video:**

**Task 1:** http://screencast.com/t/GCiCUW7JhbsS

**Task 2:** Filled out table:



**Task 1: Adding comments to original code**

//video: http://screencast.com/t/GCiCUW7JhbsS

#include <stdint.h>

#include <stdbool.h>

#include "utils/ustdlib.h"

#include "inc/hw\_types.h"

#include "inc/hw\_memmap.h"

#include "driverlib/sysctl.h"

#include "driverlib/pin\_map.h"

#include "driverlib/debug.h"

#include "driverlib/hibernate.h"

#include "driverlib/gpio.h"

int main(void)

{

SysCtlClockSet(SYSCTL\_SYSDIV\_5|SYSCTL\_USE\_PLL|SYSCTL\_XTAL\_16MHZ|SYSCTL\_OSC\_MAIN); //set clock to 40 MHz

SysCtlPeripheralEnable(SYSCTL\_PERIPH\_GPIOF); //enable port F

GPIOPinTypeGPIOOutput(GPIO\_PORTF\_BASE, GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3); //set pins PF1, PF2, PF3 as outputs

GPIOPinWrite(GPIO\_PORTF\_BASE,GPIO\_PIN\_1|GPIO\_PIN\_2|GPIO\_PIN\_3, 0x08); //turn on pin PF3 to indicate awake status

SysCtlPeripheralEnable(SYSCTL\_PERIPH\_HIBERNATE); //enable hibernation peripheral

HibernateEnableExpClk(SysCtlClockGet()); //supply hibernation module with current system clock

HibernateGPIORetentionEnable(); //retain GPIO states and remain active when waking

SysCtlDelay(64000000); //delay 4 seconds to observe the LED

HibernateRTCSet(0); //Set real time clock to 0

HibernateRTCEnable(); //Enable real time clock hibernation

HibernateRTCMatchSet(0,5); //Set RTC wake condition

HibernateWakeSet(HIBERNATE\_WAKE\_PIN | HIBERNATE\_WAKE\_RTC); //wake with pin or with RTC

GPIOPinWrite(GPIO\_PORTF\_BASE,GPIO\_PIN\_3, 0x00); //turn off pin PF3 to indicate hibernation status

HibernateRequest(); //begin hibernation

while(1)

{

}

}