Joseph Sharp Halpin
CpE 403 Section 1001
Date Submitted: 11/21/2018

Youtube Link: https://youtu.be/wfskgQo4sjA

Task 1:
config.h:

```
#define CONFIG_MAC_SUPERFRAME_ORDER  15

/*! Setting for Phy ID */
#define CONFIG_PHY_ID              (APIMAC_STD_US_915_PHY_1)

#if ((CONFIG_PHY_ID >= APIMAC_MRFSK_STD_PHY_ID_BEGIN) && (CONFIG_PHY_ID <= APIMAC_MRFSK_STD_PHY_ID_END))
/*! Setting for channel page */
#define CONFIG_CHANNEL_PAGE        (APIMAC_CHANNEL_PAGE_9)
#elif ((CONFIG_PHY_ID >= APIMAC_MRFSK_GENERIC_PHY_ID_BEGIN) && (CONFIG_PHY_ID <= APIMAC_MRFSK_GENERIC_PHY_ID_END))
/*! Setting for channel page */
#define CONFIG_CHANNEL_PAGE        (APIMAC_CHANNEL_PAGE_10)
#else
#error "PHY ID is wrong."
#endif
```
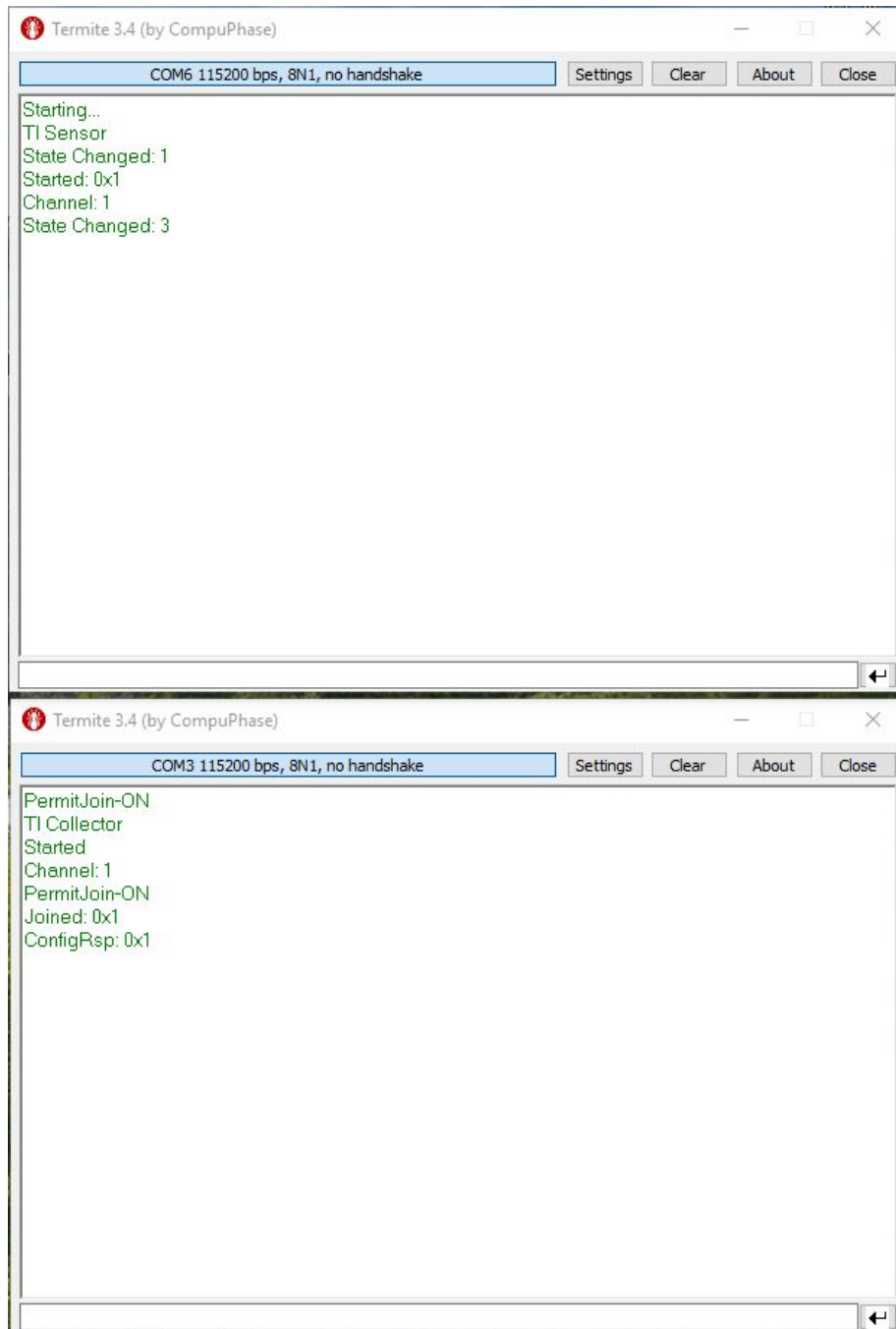
csf.c:

```
void Csf_deviceSensorDataUpdate(ApiMac_sAddr_t *pSrcAddr, int8_t rssi,
                                Smsgs_sensorMsg_t *pMsg)
{
    Board_Led_toggle(board_led_type_LED2);

    LCD_WRITE_STRING_VALUE("Temperature=", pMsg->tempSensor.objectTemp, 10, 6);

#if defined(MT_CSF)
    MTCSF_sensorUpdateIndCB(pSrcAddr, rssi, pMsg);
#endif
}
```

Task 3:
UART;

Task 4:

config.h (collector):

```
/*!
 Reporting Interval - in milliseconds to be set on connected devices using
 configuration request messages
 */
#define CONFIG_REPORTING_INTERVAL 1000
```

Config.h (sensor):

```c
#define CONFIG_PAN_CONFIG_SOLICIT_CLK_DURATION      6000
/*! Default Reporting Interval - in milliseconds. It will get updated upon
 reception of a config request message */
#define CONFIG_REPORTING_INTERVAL  500
```

UART:

Termite 3.4 (by CompuPhase) — COM3 115200 bps, 8N1, no handshake

```
PermitJoin-ON
TI Collector
Restarted
Channel: 1
PermitJoin-ON
TI Collector
Started
Channel: 1
PermitJoin-ON
PermitJoin-OFF
```


Termite 3.4 (by CompuPhase) — COM6 115200 bps, 8N1, no handshake

```
Starting...
TI Sensor
State Changed: 1
Starting...
Starting...
TI Sensor
State Changed: 1
```