

OBC

SPL, NCUSSE

Hua Ting, Hong

Hands-on Satellite System

Lecture & HomeWork 1

作業說明

期限：三個禮拜
4/7(三) 23:59前
寄到信箱

- 個人作業
- 影片上傳到youtube或google drive
- 需附上報告一份(心得100字即可，簡述這次作業學到什麼)

報告內容：

1. 影片的連結
2. 成果的截圖

最後做成壓縮檔並命名(學號_HW1_OBC_姓名)須包含：

1. 報告
2. 所有CODE

傳到 Email: djhungtim@gmail.com
主旨：【HW1_姓名_學號】

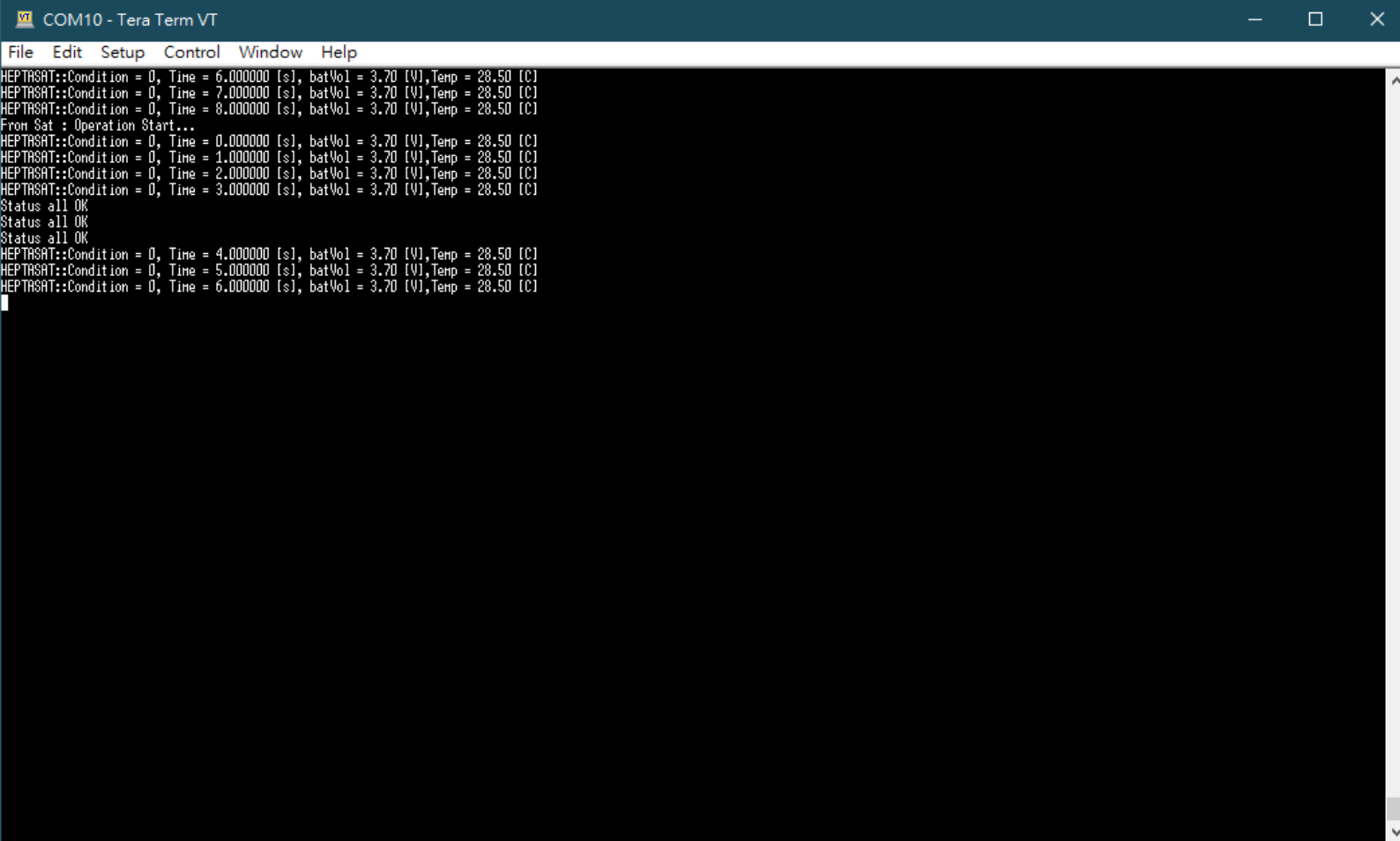
HW1 001

- 做出控制四顆LED的程式，
模式為四顆LED來回閃爍，
每顆LED閃爍週期1秒，
Duty cycle 50%，完成後拍
成影片上傳
- 請將main.cpp重新命名為
HW1_001_main_學號.cpp



HW1 002

- 透過PC傳輸字母”g”給OBC，OBC需回傳”Status all OK”並進行第一題之LED控制程式3次即可，並進行螢幕截圖，只需擷取Tera Term視窗即可
- 請將main.cpp重新命名為HW1_003_main_學號.cpp



```
COM10 - Tera Term VT
File Edit Setup Control Window Help
HEP TRSAT::Condition = 0, Time = 6.000000 [s], batVol = 3.70 [V], Temp = 28.50 [C]
HEP TRSAT::Condition = 0, Time = 7.000000 [s], batVol = 3.70 [V], Temp = 28.50 [C]
HEP TRSAT::Condition = 0, Time = 8.000000 [s], batVol = 3.70 [V], Temp = 28.50 [C]
From Sat : Operation Start...
HEP TRSAT::Condition = 0, Time = 0.000000 [s], batVol = 3.70 [V], Temp = 28.50 [C]
HEP TRSAT::Condition = 0, Time = 1.000000 [s], batVol = 3.70 [V], Temp = 28.50 [C]
HEP TRSAT::Condition = 0, Time = 2.000000 [s], batVol = 3.70 [V], Temp = 28.50 [C]
HEP TRSAT::Condition = 0, Time = 3.000000 [s], batVol = 3.70 [V], Temp = 28.50 [C]
Status all OK
Status all OK
Status all OK
HEP TRSAT::Condition = 0, Time = 4.000000 [s], batVol = 3.70 [V], Temp = 28.50 [C]
HEP TRSAT::Condition = 0, Time = 5.000000 [s], batVol = 3.70 [V], Temp = 28.50 [C]
HEP TRSAT::Condition = 0, Time = 6.000000 [s], batVol = 3.70 [V], Temp = 28.50 [C]
```

補充資料與操作示範

mbed_widows_serial_driver

<https://reurl.cc/Kx9yqm>

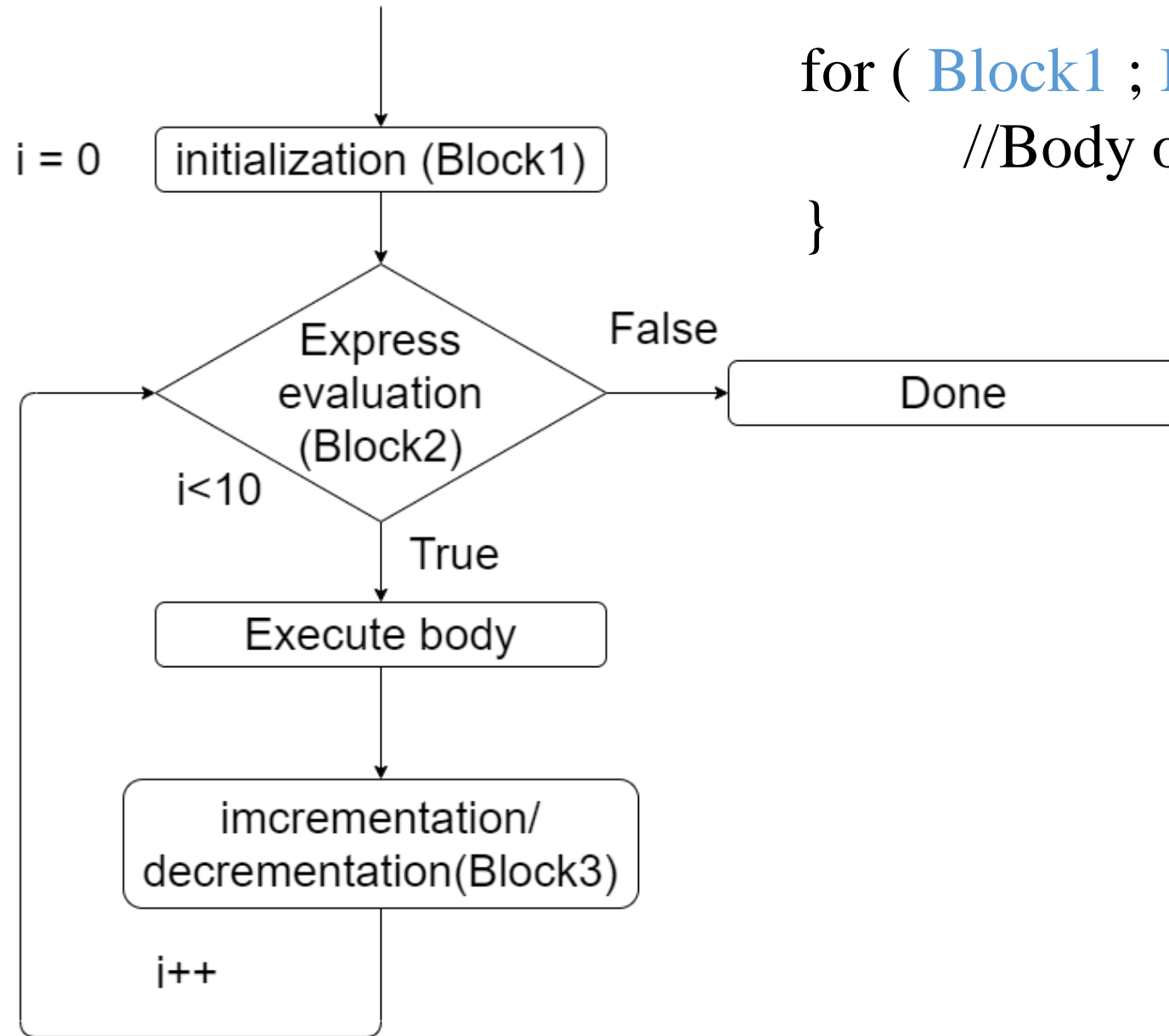
安裝可解決 Tera Term 找不到 Serial port 的問題

補充資料 for loop

for loop 基本格式

```
for ( Block1 ; Block2 ; Block3) {  
    //Body of for loop  
}
```

1. A for loop has 3 blocks created by 2 semicolons.
2. Writing 2 semicolons are mandatory.
3. But, you can leave any block empty.
4. Even you can leave all blocks empty, which creates an infinite loop.



```
for ( Block1 ; Block2 ; Block3 ) {  
    //Body of for loop  
}
```


補充資料 bitwise operators

網址:

<https://openhome.cc/Gossip/CGossip/LogicalBitwise.html>

補充資料 \r\n和\n的差異

網址：

<https://reurl.cc/3NbO8V>