In Lab2 I learned about the digital input/output of mbed and some basic function. I take microprocessor last semester, the code looks familiar and so does the 7 segment display.

(1) Lab2_1

We learn some basic function, setting digital output, checking if the pin is connected or not and Sleeping.

ThisThread::sleep_for(500ms) looks like delay function in 8051 but I think it's different how it work. I guess that mbed has OS and this will make processing other tasks more efficiently.

Also we use CoolTerm to monitoring the USB port, but mbed also can monitor the input to USB port, I just use CoolTerm to check out whether the data is transmitting or not and figure out which port(COM) I connected to my laptop.

(2) Lab2_2

In this part we learned the 7-segment display which is quite familiar.

Also the function

BusOut object(pin1,pin2,….);

Is quite convenient that we don't have to set each pin one by one.

(3) Lab2_3

In this part we learned digital input in mbed, but I still can't figure out the how GPIO mode work, maybe I'll take some time see the datasheet or google it.

(4) Discussion

Much more faster than Lab1, and I also learned that there are difference between ARM and 8051 family. In this lab we learned some basic function.