

Homework 8

1. For the following C code, implement this in ARM assembly.

```
for (loop = delay; loop > 0; loop--){  
    dummy = 0; // dummy is volatile  
}
```

2. What is the purpose of *static* in C code?

3. What is the purpose of *volatile* in C code?

4. What is the type of function that does not have a return value? Take a look at lab 3 main.c. What is the declaration of our EINT0 interrupt handler?

5. For lab 3, there is a branch instruction that takes us to the EINT0 interrupt handler. What is the address of this branch instruction? What piece of hardware is in charge of taking us to this location?

6. What is the purpose of *#defines*, and why are they better than allocating variables sometimes?

7. Write a C function that initializes P1.28 to be an output, and P1.29 to be an input without altering the other bits. Then have the code activate P1.28. Your code should not return anything. Assume that the defines are already set up for you in #lpc17xx.h