Answer each of the following questions (you can use a calculator)

a. (5 pts) Write a sequence of functions calls using i2c_start(), i2c_get(char ackbit), i2c_put(char byte), i2c_stop(), i2c_rstart() that will implement a random WRITE of the value 0xC5 to location 0x910A within the 24LC515 serial EEPROM. Assume pin A1 is tied high, and pin A0 is tied high.

```c
i2c_start();
i2c_put(0xAE); // 1010 1110
i2c_put(0x91); // MSB of address
i2c_put(0x0A); // LSB of address
i2c_put(0xC5); // value to write
i2c_stop();
```

b. (2 pts) Draw a simple schematic that shows two I2C devices connected to the I2C interface of the PIC18.

![Schematic Diagram]

Encoded within device
device specific

‘0’ Master to Slave
‘1’ Slave to Master

Start a write transaction to the 24LC515; if the EEPROM responds with a NAK after the command byte, then it is still busy with the last write. This is ‘polling for end of write’.

c. (2 pts) What does ‘polling for end of write’ mean in the 24LC515 serial EEPROM? How is this accomplished?

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