

## Post Lab 5

Frederick Rice u1252010

<https://github.com/u1252010/ECE-6780-u1252010>

1. The AUTOEND bit causes the master to send a stop condition immediately upon NBYTES transfer completion. You do not want to use it when you want to send a restart condition as you can't, the stop condition will be sent before you can send the restart condition.
2. I would write the following:
  - a. `I2C2->TIMINGR |= (0<<28);`
  - b. `I2C2->TIMINGR |= (0x9<<0);`
  - c. `I2C2->TIMINGR |= (0x3<<8);`
  - d. `I2C2->TIMINGR |= (0x1<<16);`
  - e. `I2C2->TIMINGR |= (0x3<<20);`
3. The enables are the following bits in the I2C\_CR1 register:
  - a. TCIE – bit 6
  - b. NACKIE – bit 4
  - c. TXIE – bit 1
  - d. ERRIE – bit 7
4.  $\pm 250, \pm 500, \pm 2000$
5. The datasheet says the following:
  - a. SDO = 1 : SAD = 1101011b
  - b. SDO = 0 : SAD = 1101010b