## Homework #2: ECE 461 / 661

Timers & Counters. Due Wednesday, September 6th

(will accept any time before December 8th so you can use the Micro810 PLC's)

Note: For this assignment, you may use

- Allen Bradley Micro810 PLCs ( ECE room 211 or check one out ), or
- PLC Fiddle ( https://www.plcfiddle.com/ )

## **Auto-Fire Cheats**

Write a ladder logic program to output NDSU in Morse Code.

Press INO:

• Output Out0 goes high for 5.00 seconds when IN0 is pressed (rising edge)

Press IN1

- Output Out1 goes high for 500ms, low for 500ms one time
- Then Out1 goes high and turns off 5.00 seconds after the rising edge of IN1

Press IN2

- Output Out2 goes high for 500ms, low for 500ms two times
- Then Out2 goes high and turns off 5.00 seconds after the rising edge of IN2

## Press IN3

- Output Out3 goes high for 500ms, low for 500ms three times
- Then Out3 goes high and turns off 5.00 seconds after the rising edge of IN3

