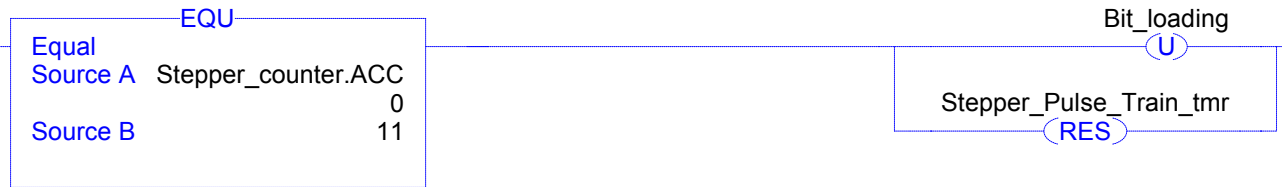
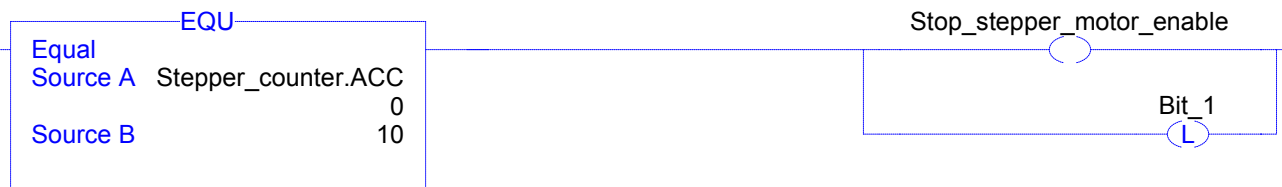




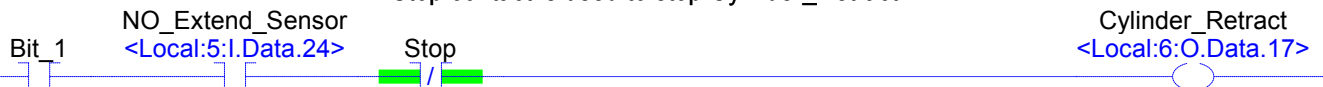
When Stepper Motor moves 10 steps, the Bit\_loading will unlatched and Stepper\_Pulse\_train\_tm timer will be reset.  
In equal function EQU, 11 is used since the counter counts to 1 before the motor rotates the first time



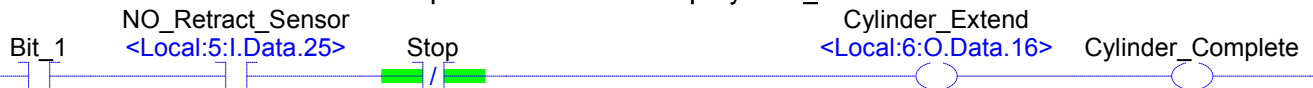
When Stepper\_counter is equal to 10, the Stepper\_motor\_enable will turned off and Bit\_1 will be latched.  
Bit\_1 is used to turn on Cylinder\_Retract and Cylinder\_Extend.



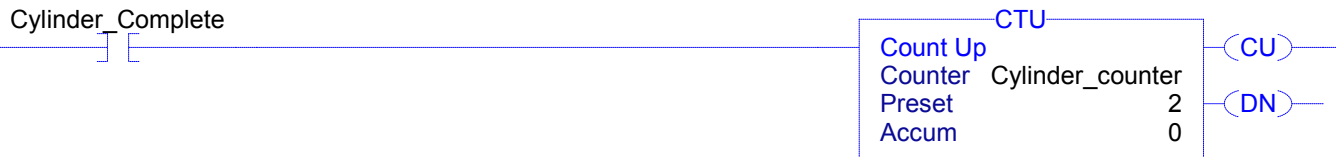
When Bit\_1 and NO\_Extend\_Sensor are turned on, the Cylinder\_Retract will be turned on.  
Stop contact is used to stop Cylinder\_Retract.



When Bit\_1 and NO\_Retract\_Sensor are turned on, the Cylinder\_Extend and Cylinder\_Complete will be turned on.  
Stop contact is used to stop Cylinder\_Extend.



After Cylinder\_Complete is activated, Cylinder\_counter CTU is used to keep track of how many times Cylinder retract and extend.



After cylinder extend and retract two times, the timers, counters, and cylinder should reset.  
In EQU Source B 3 is used since Cylinder\_counter counts to 1 before cylinder even extends the first time.

