Lab 5 Pseudo Code

Set up:

- Set Port C 0-4 as outputs for LEDS
- Set Port C 5 as input for potentiometer
- Start with all LEDs off
- Set up A/D conversion
    - Select A/D channel (pin to be used) - ADMUX register
    - Select voltage reference- ADMUX register
    - Turn on power to the ADC - PRR register
    - Enable the ADC - ADCSRA register
    - Set the ADC result location- ADMUX register
    - Set the ADC conversion frequency- ADCSRA register

Main:

- Five speeds correspond to LEDs being on:
    - Stopped (LED 2)
    - slow forward (LED 3)
    - slow backward (LED 1)
    - fast forward (LED 4)
    - fast backward (LED 0)
- Check position of potentiometer: 5 subranges of 1V each , and set LED/motor accordingly
    - Lowest Voltage(1V)= fast backward (LED 0)
    - Second voltage(2V)= slow backward (LED 1)
    - Middle voltage(3V)= stopped (LED 2)
    - Fourth Voltage(4V)=slow forward (LED 3)
    - Higher voltage(5V)= fast forward (LED 4)