```
405
     406
407
408
   void setup() {
409
410
      // Setup encoder inputs
      pinMode (encoderOPinA, INPUT);
411
      pinMode (encoderOPinB, INPUT);
412
      pinMode (encoder0PinZ,INPUT);
413
414
      pinMode (encoder1PinA, INPUT);
      pinMode (encoder1PinB, INPUT);
415
      pinMode (encoder1PinZ,INPUT);
416
      pinMode (LEDPwr, OUTPUT);
417
418
      digitalWrite(LEDPwr, HIGH);
      Serial.begin (9600); // Start serial output for debugging
419
      loopCount = 0;
420
      calibrateThrottle();
421
      calibrateSteering();
422
423
424
    425
      426
      427
      428
      429
      430
431
432
433
   -void loop() {
434
435
      loopStart = millis();
436
      //packVoltage(); //Check the battery pack to see if it is within safe operating voltage
437
      // This section of the code uses the throttle code by Dakota to drive the cart from the throttle potentiometer
438
439
440
      analogReadResolution(Res);
      int throttle in = analogRead(throttlePin);
441
      delay(ADC DELAY); // Delays after analogRead to allow capacitors to charge and cancels cross talk between reads
442
      throttle in = analogRead(throttlePin);
443
444
      analogReadResolution(Res);
445
      int Steering = analogRead(steeringPin);
446
      delay(ADC DELAY);
447
448
      Steering = analogRead(steeringPin);
449
         #if DEBUG
450
           #if USER INPUT
451
          Serial.print("Gas: ");
                                              //Debug Statements ~ visual data
452
          Serial.println(throttle in);
453
          Serial.print("Steering");
454
455
          Serial.println(Steering);
          #endif
456
         #endif
457
458
459
      /*if ((RPM 0 Last < maxRPM) || (RPM 1 Last < maxRPM)){</pre>
        RPM 0 = readEncoderAB(encoderOPinA, encoderOPinB); //This function has no output because it changes global variables within the function.
460
                       // Read Encoder pins A and B if RPM is in "low range" (Reads for both encoders)
461
        RPM_1 = readEncoderAB(encoder1PinA, encoder1PinB); //This function has no output because it changes global variables within the function.
462
463
                    // Read Encoder pins A and B if RPM is in "low range" (Reads for both encoders)
464
      } else {
```