```
// LIDAR Defined if we are using lidar
#define LIDAR

#ifdef LIDAR
    #include <LIDARLite.h>
    #include <Wire.h>
    LIDARLite lidar1;
#endif

// Strings to store data
String xStr = "0";
String yStr = "0";
String zStr = "0";

// Floats to put translated data into
float xVal = 0;
float yVal = 0;
float zVal = 0;

// Function to send command to and recieve data from gyro
void getData(char* msg) {
    Serial.write(msg);
    delay(100);
    Serial.println(Serial.readStringUntil('\n'));
}

// Function to send command to gyro
void sendData(char* msg) {
    Serial.write(msg);
}


void sensorStart() {

    // Flash LED
    digitalWrite(2,LOW);
    delay(150);
    digitalWrite(2,HIGH);
    delay(1000);
    digitalWrite(2,LOW);

    // Send command to tare gyro
    sendData(":96\n");

    // Pause to let command send
    delay(2000);

    // Turn LED off
    digitalWrite(2,HIGH);
    delay(500);
}


void setup() {
    // Start serial
    Serial.begin(115200);

#ifdef LIDAR
    // Start lidar code
    lidar1.begin(0);
    lidar1.configure(0);
#endif

    // Set pinout
    pinMode(2,OUTPUT);
    pinMode(4,OUTPUT);
    pinMode(3,INPUT_PULLUP);
    // Turn light on
    digitalWrite(2,HIGH);
    Serial.setTimeout(10);
    // Tare gyro
    sendData(":96\n");
}

// Var to count how long button help
int count = 0;
void loop() {

    // If button held
    if (!digitalRead(3)) {
        // Count how long
        count++;
        if (count > 25) {
            // Run function and reset counter
            sensorStart();
            count = 0;
        }
    }
    else {
        // If button released, count back to 0
        count = 0;
    }

    // Send command 'read angle'
    sendData(":1\n");
    // Turn LED off
    digitalWrite(2,HIGH);

    // Pause to let command data recieve
    delay(10);
```