#define echoPinLeft 7 // Echo Pin for Left Module

#define trigPinLeft 8 // Trigger Pin for Left Module

#define echoPinRight 2 // Echo Pin for Right Module

#define trigPinRight 4 // Trigger Pin for Right Module

#define buzzer 12 // Onboard Buzzer

void setup() {

Serial.begin (9600);

pinMode(trigPinLeft, OUTPUT);

pinMode(trigPinRight, OUTPUT);

pinMode(echoPinLeft, INPUT);

pinMode(echoPinRight, INPUT);

pinMode(buzzer, OUTPUT);

}

long durationRight, distanceRight, durationLeft, distanceLeft; // Duration used to calculate distance

int maximumRange = 100; // Maximum range needed

int minimumRange = 1; // Minimum range needed

void loop() {

/\* The following trigPin/echoPin cycle is used to determine the

distance of the nearest object by bouncing soundwaves off of it. \*/

digitalWrite(trigPinLeft, LOW);

delayMicroseconds(2);

digitalWrite(trigPinLeft, HIGH);

delayMicroseconds(10);

digitalWrite(trigPinLeft, LOW);

durationLeft = pulseIn(echoPinLeft, HIGH);

//Calculate the distance (in cm) based on the speed of sound.

distanceLeft = durationLeft/58.2;

digitalWrite(trigPinRight, LOW);

delayMicroseconds(2);

digitalWrite(trigPinRight, HIGH);

delayMicroseconds(10);

digitalWrite(trigPinRight, LOW);

durationRight = pulseIn(echoPinRight, HIGH);

//Calculate the distance (in cm) based on the speed of sound.

distanceRight = durationRight/58.2;

if ((distanceLeft <= maximumRange && distanceLeft > minimumRange ) || (distanceRight <= maximumRange && distanceRight > minimumRange)){

/\* Send the distance to the computer using Serial protocol, and

turn buzzer on to indicate successful reading. \*/

Serial.println("Distance Left: ");

Serial.println(distanceLeft);

Serial.println("Distance Right: ");

Serial.println(distanceRight);

digitalWrite(buzzer, HIGH);

} else {

/\* Send a negative number to computer and Turn buzzer off

to indicate "out of range" \*/

Serial.println("-1");

digitalWrite(buzzer, LOW);

}

//Delay 100ms before next reading.

delay(1000);

}