// C++ code

//

int PIR = 0;

int photo = 0;

int tmp = 0;

int gas = 0;

void setup()

{

pinMode(A2, INPUT);

pinMode(2, INPUT);

pinMode(A1, INPUT);

pinMode(A0, INPUT);

Serial.begin(9600);

pinMode(3, OUTPUT);

pinMode(13, OUTPUT);

}

void loop()

{

photo = analogRead(A2);

PIR = digitalRead(2);

tmp = (-40 + 0.488155 \* (analogRead(A1) - 20));

gas = analogRead(A0);

Serial.println(gas);

if (PIR == 1) {

while (PIR == 1) {

digitalWrite(3, HIGH);

delay(100); // Wait for 100 millisecond(s)

digitalWrite(3, LOW);

delay(100); // Wait for 100 millisecond(s)

PIR = digitalRead(2);

}

}

if (photo >= 500) {

digitalWrite(3, HIGH);

} else {

digitalWrite(3, LOW);

}

if (500 > gas) {

noTone(13);

} else {

tone(13, 523, 1000); // play tone 60 (C5 = 523 Hz)

delay(100); // Wait for 100 millisecond(s)

noTone(13);

delay(100); // Wait for 100 millisecond(s)

}

}