



```

const int gas = 0;
int MQ2pin = A0;
int led = 13;           // the pin that the LED is attached to
int sensor = 2;         // the pin that the sensor is attached to
int state = LOW;        // by default, no motion detected
int val = 0;

void setup() {
  Serial.begin(96000);
  pinMode(led, OUTPUT);  // initialize LED as an output
  pinMode(sensor, INPUT); // initialize sensor as an input
  Serial.begin(9600);
}

void loop() {
  val = digitalRead(sensor); // read sensor value
  if (val == HIGH) {         // check if the sensor is HIGH
    digitalWrite(led, HIGH); // turn LED ON
    delay(500);              // delay 100 milliseconds

    if (state == LOW) {
      Serial.println("Motion detected!");
      state = HIGH;        // update variable state to HIGH
    }
  }
  else {
    digitalWrite(led, LOW); // turn LED OFF
    delay(500);             // delay 200 milliseconds

    if (state == HIGH){
      Serial.println("Motion stopped!");
      state = LOW;         // update variable state to LOW
    }
  }

  float sensorValue, MQ2pin; //Gas sensor
  sensorValue = analogRead(MQ2pin);
  if(sensorValue >= 470){
    digitalWrite(11,HIGH);
    digitalWrite(9,HIGH);
    Serial.print(sensorValue);
    Serial.println(" !!ALERT!!");
  }
  else{
    digitalWrite(11,LOW);
    digitalWrite(9,LOW);
    Serial.println("Sensor Value: ");
    Serial.println(sensorValue);
  }
  delay(1000);
}

float getsensorValue(int pin){
  return (analogRead(pin));
}

```