

```
#include <Servo.h>

// Define sensor pins
const int mq2Pin = A0;
const int mq6Pin = A1;
const int flamePin = A2;
const int tempPin = A3;
const int relayPin = 7;
const int buzzerPin = 5;
Servo gasValve;

void setup() {
  Serial.begin(9600);
  pinMode(relayPin, OUTPUT);
  pinMode(buzzerPin, OUTPUT);
  gasValve.attach(8);
  gasValve.write(0);
}

void loop() {
  int mq2Value = analogRead(mq2Pin);
  int mq6Value = analogRead(mq6Pin);
  int flameValue = digitalRead(flamePin);
  int tempValue = analogRead(tempPin); // Assuming a simple analog temperature sensor

  // Check for smoke
  if (mq2Value > thresholdSmoke) {
    activateAlarm();
  }
}
```

```
// Check for gas
if (mq6Value > thresholdGas) {
    activateAlarm();
}
```

```
// Check for flame
if (flameValue == HIGH) {
    activateAlarm();
}
```

```
// Example temperature check (assuming a threshold)
if (tempValue > thresholdTemperature) {
    activateAlarm();
}
```

```
delay(1000); // Delay for stability
}
```

```
void activateAlarm() {
    digitalWrite(relayPin, HIGH); // Activate relay
    digitalWrite(buzzerPin, HIGH); // Sound buzzer
    gasValve.write(90); // Open gas valve to shut off gas
    delay(5000);
    digitalWrite(buzzerPin, LOW);
    digitalWrite(relayPin, LOW);
    gasValve.write(0);
}
```