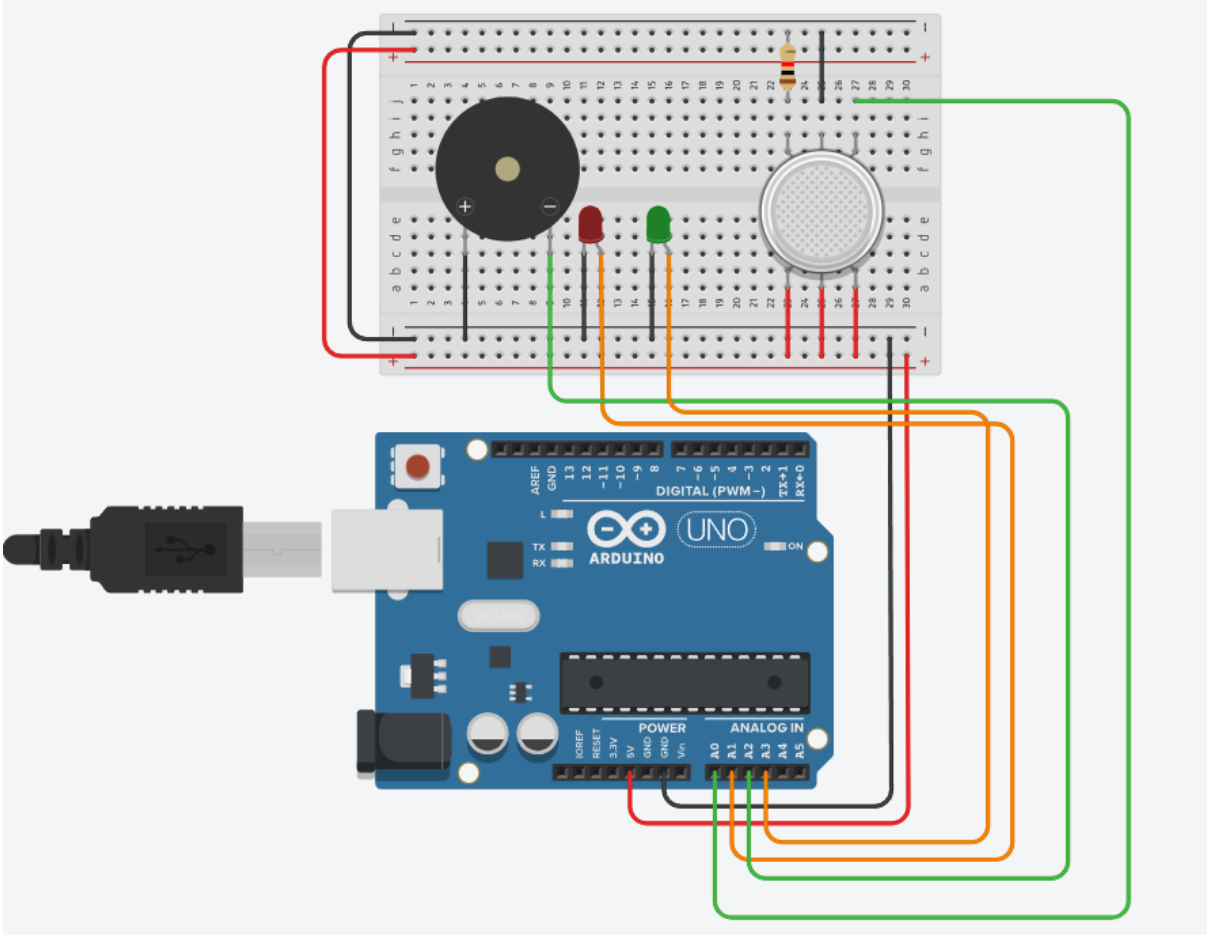
Experiment 8 : **Develop a program to detect the gas leakage in the surrounding environment.**

Circuit Diagram:



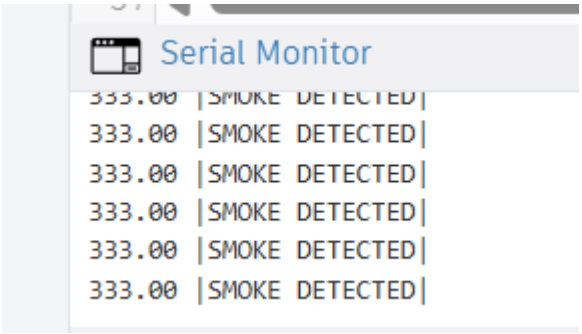
Code:

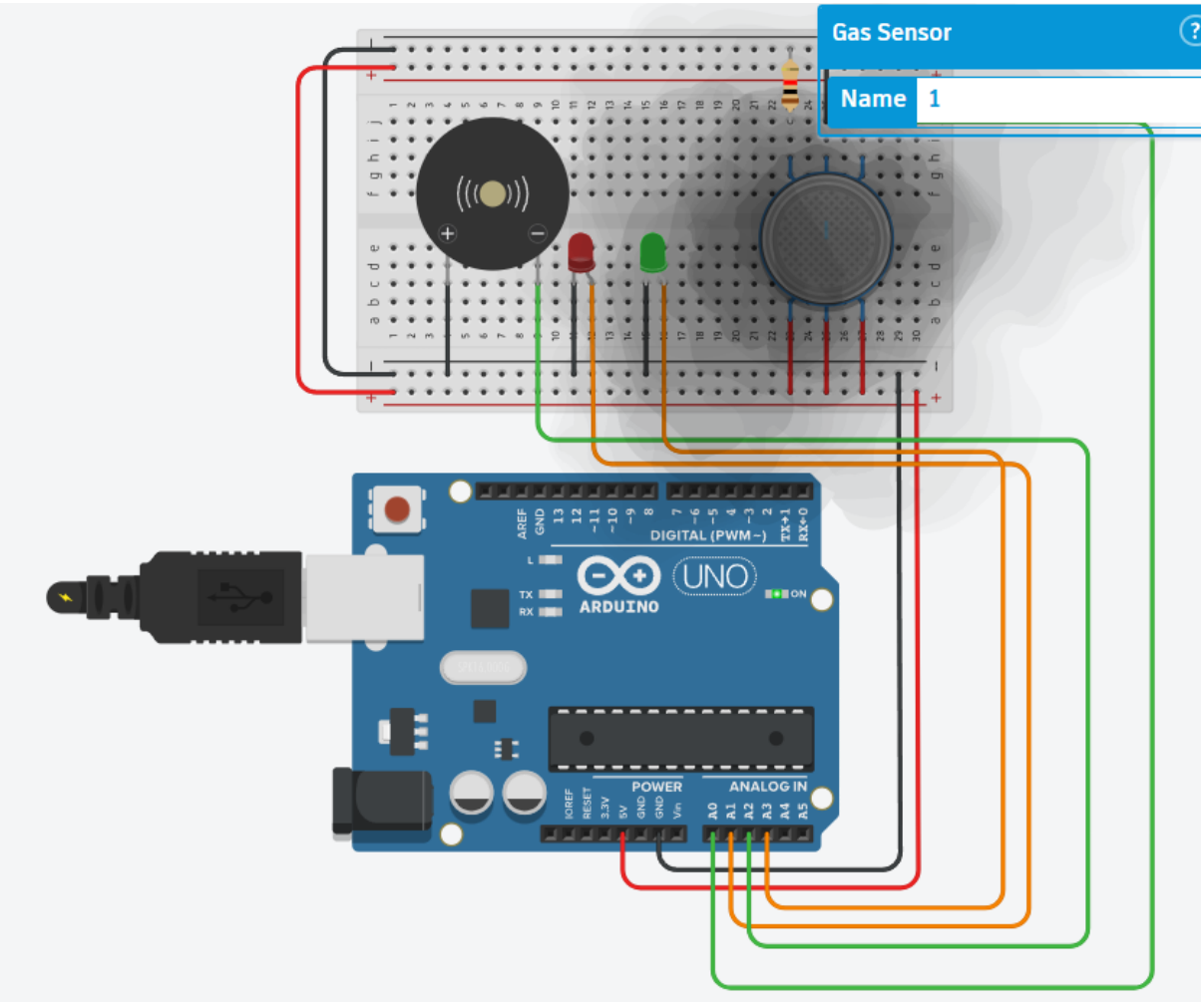
```
int LED = A1;         //Red LED
int LED1 = A3;        //Green LED
int gas_pin = A0;     // For Gas Sensor
int buzzer_pin = A2;  // For Buzzer



void setup()
```

```
{
  Serial.begin(9600);
  pinMode (buzzer_pin, OUTPUT);
  pinMode (gas_pin, INPUT);
  pinMode(LED, OUTPUT);
  pinMode(LED1, OUTPUT);
}

void loop() {
        float sensorValue;
   sensorValue = analogRead(gas_pin); // read analog input pin 0


  if(sensorValue >= 300)
  {
    digitalWrite(LED,HIGH);
    digitalWrite(LED1,LOW);

    digitalWrite (buzzer_pin, HIGH);
    //Serial.println();
    Serial.print(sensorValue);
    Serial.println(" |SMOKE DETECTED|");
  }

  else
  {
        digitalWrite(LED,LOW);
    digitalWrite(LED1,HIGH);
```

```
    digitalWrite (buzzer_pin, LOW);
    Serial.println();
    Serial.println("Sensor Value: ");
    Serial.print(sensorValue);
    //Serial.print(" |Safe Mode|");
  }

  delay(1000);

}
```

Output:




Gas Sensor
Name
1
DIGITAL (PWM~)
UNO
ARDUINO
POWER
ANALOG IN