

Final Code

Team Id	PNT2022TMID13299
Project Name	Gas Leakage Monitoring and Alerting System

Code:

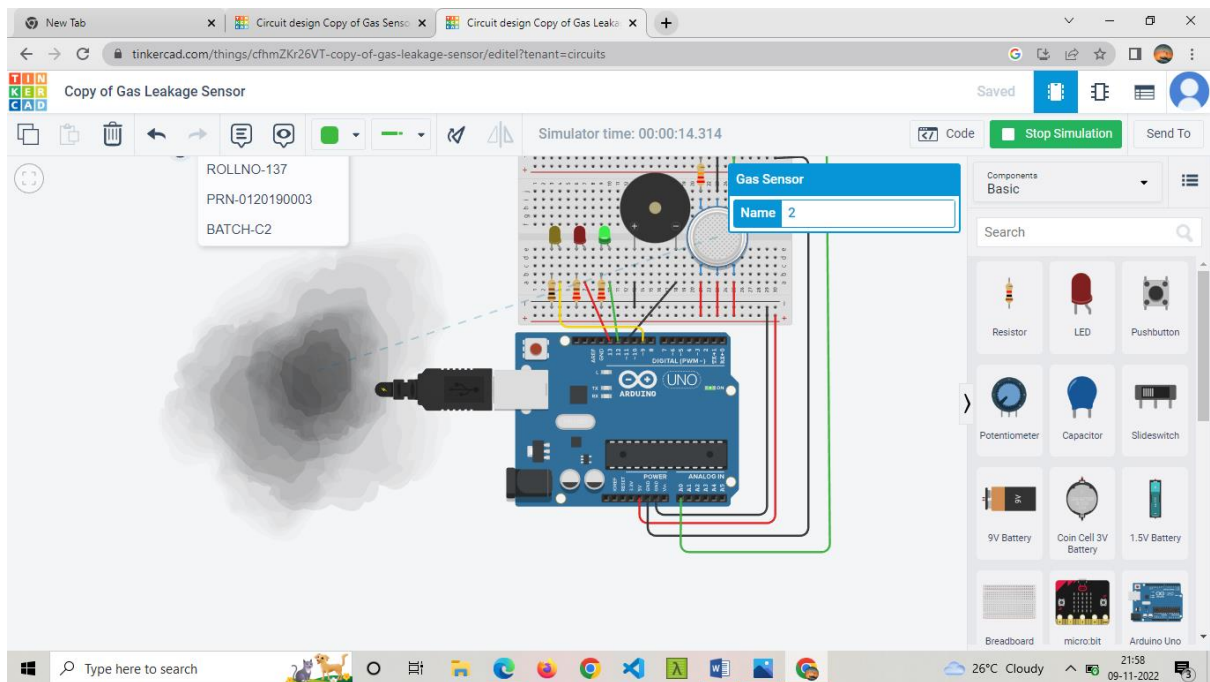
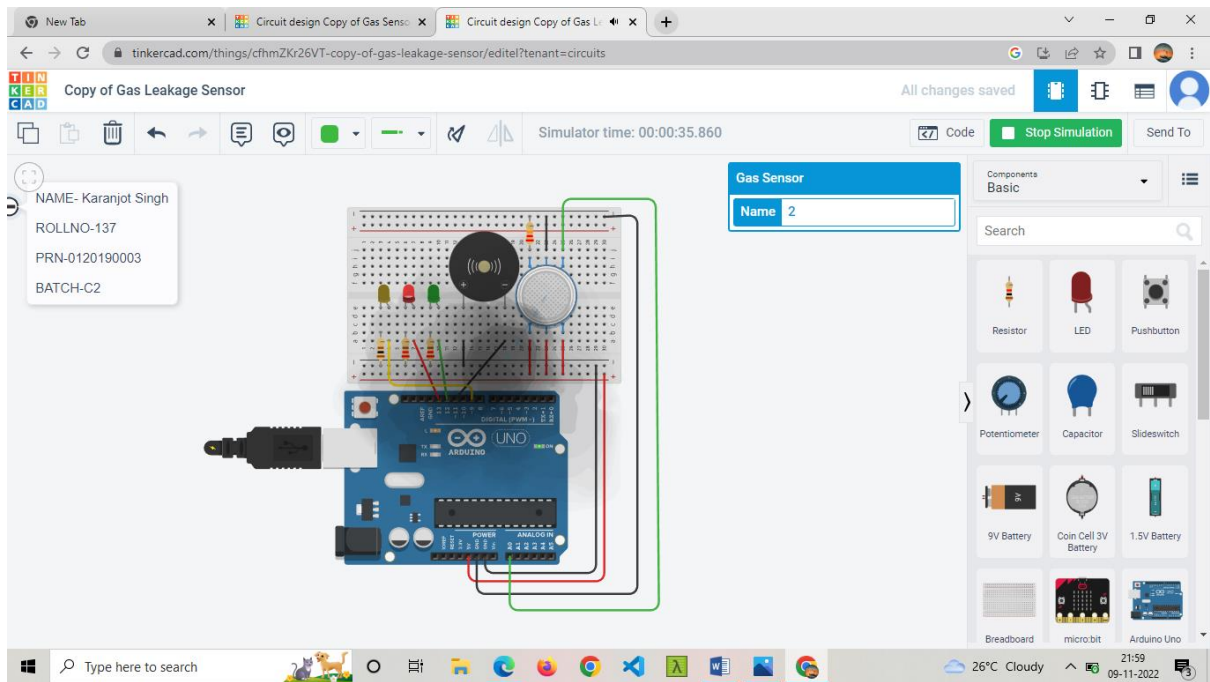
```
int redLed = 13;
int greenLed = 12;
int yelloled = 9;
int buzzer = 11;
int smokeA0 = A0;
void setup()
{
  pinMode(redLed, OUTPUT);
  pinMode(greenLed, OUTPUT);
  pinMode(yelloled, OUTPUT);
  pinMode(buzzer, OUTPUT);
  pinMode(smokeA0, INPUT);
  Serial.begin(9600);
}

void loop()
{
  int analogSensor = analogRead(smokeA0);

  Serial.print("Gas Level: ");
  Serial.println(analogSensor);
```

```
if (analogSensor > 682 && analogSensor < 719)
{
    digitalWrite(yelloled, HIGH);
    digitalWrite(greenLed, LOW);
    digitalWrite(redLed, LOW);
    tone(buzzer, 3000, 200);
}
else if(analogSensor > 720)
{
    digitalWrite(redLed, HIGH);
    digitalWrite(greenLed, LOW);
    digitalWrite(yelloled, LOW);
    tone(buzzer, 1000, 200);
}

else
{
    digitalWrite(redLed, LOW);
    digitalWrite(greenLed, HIGH);
    digitalWrite(yelloled, LOW);
    noTone(buzzer);
}
    delay(100);
}
```



Copy of Gas Leakage Sensor

NAME- Karanjot Singh
ROLLNO-137
PRN-0120190003
BATCH-C2

Simulator time: 00:00:34.831

Gas Sensor
Name 2

Components
Basic

Search

Resistor
LED
Pushbutton
Potentiometer
Capacitor
Slideswitch
9V Battery
Coin Cell 3V Battery
1.5V Battery
Breadboard
micro:bit
Arduino Uno

The image shows a Tinkercad web interface for a circuit simulation. The main workspace displays an Arduino Uno connected to a breadboard. On the breadboard, there is a gas sensor module, a potentiometer, and an LED. Wires connect the components to the Arduino pins. On the right, the 'Components' panel is open, showing a search bar and a grid of basic components like Resistor, LED, Pushbutton, Potentiometer, Capacitor, Slideswitch, 9V Battery, Coin Cell 3V Battery, 1.5V Battery, Breadboard, micro:bit, and Arduino Uno. A 'Gas Sensor' component is highlighted with a name field set to '2'. On the left, a user information box displays the name 'Karanjot Singh', roll number '137', PRN '0120190003', and batch 'C2'. The top of the browser shows the URL 'tinkercad.com/things/cfhmZKr26VT-copy-of-gas-leakage-sensor/edit?tenant=circuits'. The bottom status bar shows '26°C Cloudy' and the date '09-11-2022'.