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Enrollment number - 21162101012 & 21162101017
Branch - CBA   Batch - 71
IOT Practical 6

AIM : Interface Smoke sensor with Arduino and test it with a buzzer & LED.

Code :

```cpp
#define gasSensor A0
#define buzzer 8
#define ledGreen 13
#define ledRed 12
#define HIGH 74

void setup() {
   // Initializing all pins
   pinMode(gasSensor, INPUT);
   pinMode(buzzer, OUTPUT);
   pinMode(ledGreen, OUTPUT);
   pinMode(ledRed, OUTPUT);

   // Initialize Serial communication at 9600 baud rate
   Serial.begin(9600);
}

void loop() {
   // Read data from the sensor
   int gas_value = analogRead(gasSensor);

   // Print gas sensor value to the Serial Monitor
   Serial.print("Gas Sensor Value: ");
   Serial.println(gas_value);
```

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```cpp
  // Check data from sensor; if there is smoke, the 'if' block
will execute, otherwise 'else' will execute
  if (gas_value > HIGH) {
    tone(buzzer, 1000, 500);  // Sound the buzzer
    digitalWrite(ledRed, HIGH);  // Turn on red LED
    digitalWrite(ledGreen, LOW); // Turn off green LED
  }
  else {
    noTone(buzzer);   // Turn off buzzer
    digitalWrite(ledGreen, HIGH); // Turn on green LED
    digitalWrite(ledRed, LOW);    // Turn off red LED
  }

  delay(200);  // Short delay
}
```

Output:
🎬 **Smoke Sensor.mp4**