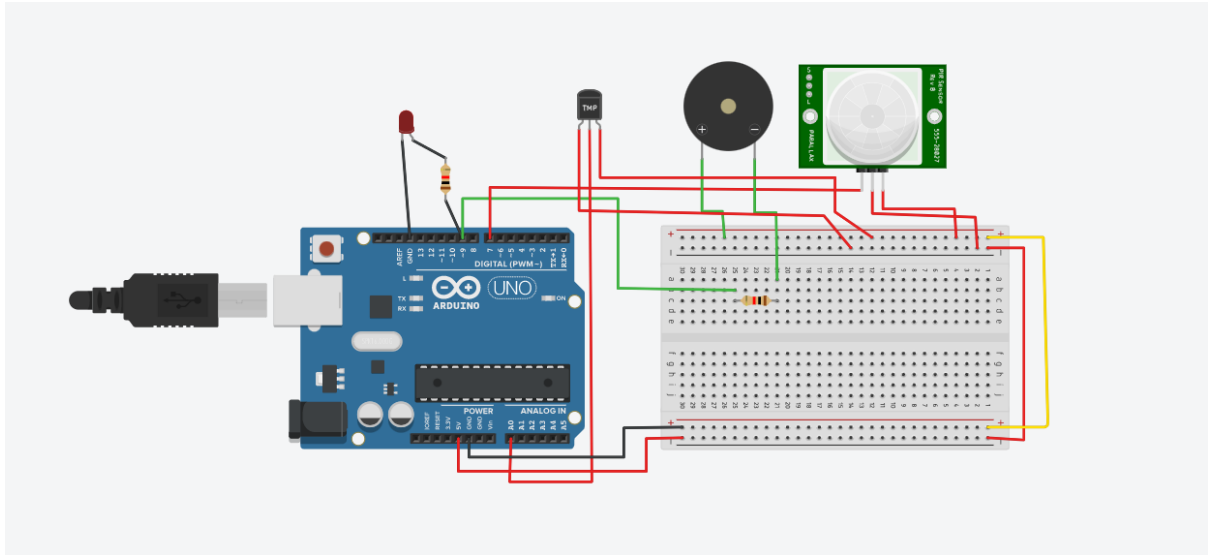


GAS LEAKAGE MONITORING AND ALERTING SYSTEM FOR INDUSTRIES

ASSIGNMENT 1-SMART HOME

CIRCUIT:

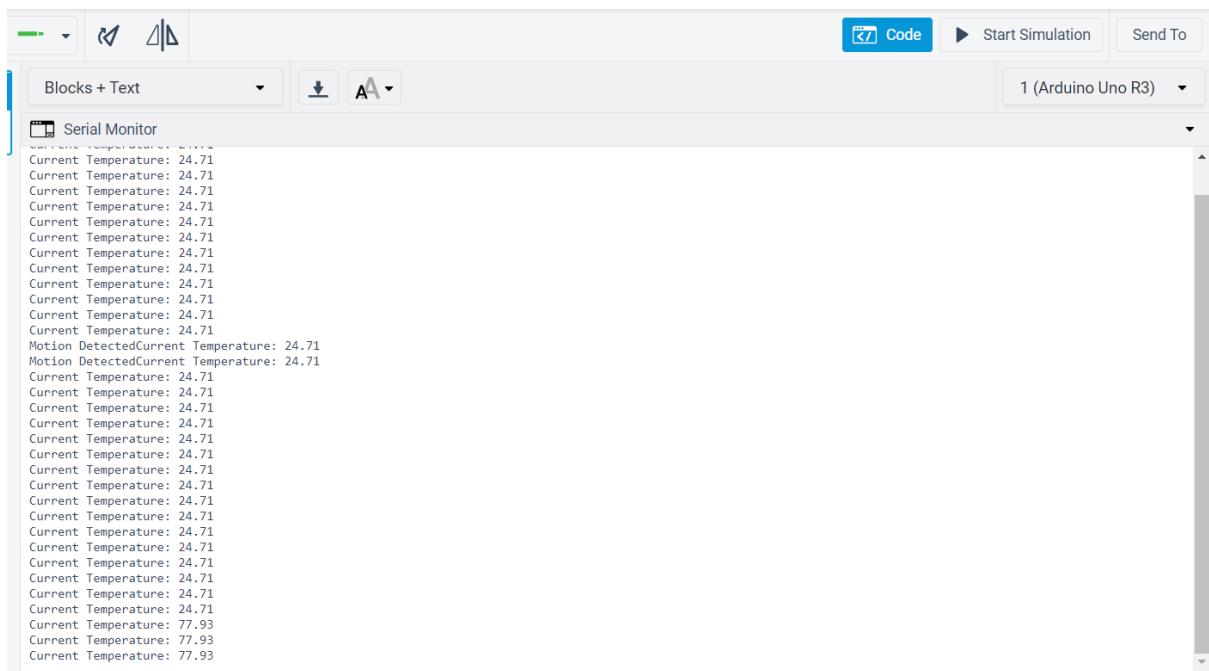


CODE:

```
const int buzzer = 9;
int sensePin = A0;
int sensorInput;
double temp;
#define pirPin 7
int calibrationTime = 30;
long unsigned int lowIn;
long unsigned int pause = 5000;
boolean lockLow = true;
boolean takeLowTime;
int PIRValue = 0;
void setup(){
```

```
Serial.begin(9600);
pinMode(pirPin, INPUT);
pinMode(buzzer, OUTPUT);
}
void loop(){
  sensorInput = analogRead(A0);
  temp = (double)sensorInput / 1024;
  temp = temp * 5;
  temp = temp - 0.5 ;
  temp = temp * 100;
  if(temp > 60){
    tone(buzzer, 1000);
    delay(1000);
    noTone(buzzer);
    delay(1000);}
  Serial.print("Current Temperature: ");
  Serial.println(temp);
  PIRSensor();
}
void PIRSensor() {
  if(digitalRead(pirPin) == HIGH) {
    Serial.print("Motion Detected");
    tone(buzzer, 2000);
    delay(1000);
    noTone(buzzer);
    delay(1000);}
}
```

OUTPUT:



The screenshot shows the Arduino IDE interface with the Serial Monitor open. The monitor displays a series of temperature readings. The first 16 lines show 'Current Temperature: 24.71'. The next two lines show 'Motion DetectedCurrent Temperature: 24.71'. This is followed by another 16 lines of 'Current Temperature: 24.71'. The final two lines show 'Current Temperature: 77.93'. The IDE toolbar at the top includes a 'Code' button, 'Start Simulation', and 'Send To' buttons. The 'Blocks + Text' tab is selected, and the board is set to '1 (Arduino Uno R3)'.

```
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Motion DetectedCurrent Temperature: 24.71
Motion DetectedCurrent Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 24.71
Current Temperature: 77.93
Current Temperature: 77.93
Current Temperature: 77.93
```