BUILD A SMARTHOME WITH USING AT LEAST 2 SENSORS,LED AND BUZZER WITH SINGLE CODE

SIMULATION

```
#include <LiquidCrystal.h>

#include <IRremote.h>

#include <Servo.h>

#define ROTOR 6

LiquidCrystal lcd(12, 11, 5, 4, 3, 2);

int air = 0;

int pinTempGreen = 1;

int const ANALOG_INPUT_GAS = A0;

int const PIN_GREEN = 8;

int const PIN_YELLOW = 9;

int const PIN_RED = 10;

int const PIN_IR = 7;

int const PIN_BELL = 13;

IRrecv irrecv(PIN_IR);

decode_results results;



void setup()

{

  pinMode(ANALOG_INPUT_GAS, INPUT);

  pinMode(PIN_GREEN, OUTPUT);
```

```
  pinMode(PIN_YELLOW, OUTPUT);
  pinMode(PIN_RED, OUTPUT);
  pinMode(PIN_BELL, OUTPUT);
  pinMode(pinTempGreen, INPUT);
  pinMode(ROTOR, OUTPUT);
  irrecv.enableIRIn();

  Serial.begin(9600);
  lcd.begin(16, 2);

}

void loop() {
  if (irrecv.decode(&results)) {
    unsigned int value = results.value;

    for (int b = 0; value >= 0; b++) {

    double temp = analogRead(pinTempGreen);
    int i = (((temp/1023)*5)*1000)/10-48;

    switch (value) {
      case 2295:
                air = analogRead(A0);
           digitalWrite(PIN_GREEN, HIGH);
```

```
if (air >= 0 && air <= 20 && i <= 49) {
   lcd.setCursor(0, 0);
   lcd.print("NORMAL");
   lcd.setCursor(0, 1);
   lcd.print("Air: ");
   lcd.print(air);
   lcd.print(" Temp: ");
   lcd.print(i);

   digitalWrite(PIN_YELLOW, LOW);
   digitalWrite(PIN_RED, LOW);
   analogWrite(ROTOR, 0);

   for (int i = 0; i < 250; i++) {
      analogWrite(ROTOR, 0);
      delay(25);
   }
   lcd.clear();

   } else if (air >= 21 && air <= 30 && i <= 49) {
      lcd.setCursor(0, 0);
      lcd.print("DANGEROUS AIR");
      lcd.setCursor(0, 1);
      lcd.print("Air: ");
```

```
    lcd.print(air);
    lcd.print(" Temp: ");
    lcd.print(i);
    digitalWrite(PIN_YELLOW, HIGH);
    digitalWrite(PIN_RED, LOW);

    for (int i = 0; i < 250; i++) {
      analogWrite(ROTOR, 255);
      delay(25);
    }
    lcd.clear();

} else if (air >= 31 || i >= 50) {
    lcd.setCursor(0, 0);
    lcd.print("ALARM! FIRE! DANGEROUS!");
    lcd.setCursor(0, 1);
    lcd.print("Air: ");
    lcd.print(air);
    lcd.print(" Temp: ");
    lcd.print(i);
    digitalWrite(PIN_YELLOW, HIGH);
    digitalWrite(PIN_RED, HIGH);
    digitalWrite(PIN_BELL, HIGH);

    for (int i = 0; i < 250; i++) {
```

```
                analogWrite(ROTOR, 255);
                delay(25);
              }
              lcd.clear();
            }
            digitalWrite(PIN_BELL, LOW);
              break;

    case 34935:
          lcd.setCursor(0, 0);
      lcd.print("SWITCHED OFF");
          break;
  }
  irrecv.resume();
  }
 }
}
```

CIRCUIT DIAGRAM