



CIRCUIT DIAGRAM.

Aim: Design an alert system using flame sensor.

HARDWARE REQUIRED :-

- Arduino Board
- LED.
- Breadboard
- Temperature sensor (LM35)
- Buzzer

CODE

```
const int temperaturePin = 0;
int buzzer = 12;
void setup()
{
  Serial.begin(9600);
  pinMode(buzzer, OUTPUT);
  pinMode(9, OUTPUT);
}
float getVoltage (int pin)
{
  return (analogRead(pin) * 0.004882814);
}
```

Teacher's Signature : _____


```
void loop()
```

```
{
```

```
  float voltage, degreeC;
```

```
  voltage = getVoltage(TemperaturePin);
```

```
  degreeC = (voltage - 0.5) * 100.0;
```

```
  digitalWrite(9, LOW);
```

```
  if (degreeC < 37)
```

```
  {
```

```
    serial.print(degreeC);
```

```
    serial.print("SAFE!");
```

```
  }
```

```
  if (degreeC > 37)
```

```
  {
```

```
    serial.print(degreeC);
```

```
    serial.println("ALERT!!");
```

```
    digitalWrite(buzzer, LOW);
```

```
    digitalWrite(9, HIGH);
```

```
    tone(12, 1000, 100);
```

```
    delay(100);
```

```
  }
```

```
}
```