

USN: 2BM18CS103

PROGRAM : 9PROGRAM TITLE : Alert SystemAIM : Design an alert system using flame sensor (use temp sensor for experiments in tinkercad).Hardware Required :

- Arduino
- Piezo
- Temperature Sensor
- LED

CODE :

```
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);
```

```
}
```

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void loop()

{

```
float voltage, degreesC;  
voltage = getVoltage(temperaturePin);  
degreesC = (voltage - 0.5) * 100.0;  
digitalWrite(9, LOW);  
if (degreesC > 37)
```

{

```
Serial.print(degreesC);  
Serial.println("ALERT!");  
digitalWrite(buzzer, LOW);  
digitalWrite(9, HIGH);  
tone(12, 10000, 100);  
delay(200);
```

}

else {

```
Serial.print(degreesC);  
Serial.print("SAFE!");  
delay(200);
```

}

}

CIRCUIT DIAGRAM

