

Name: Ahmed AG  
USN: IBM18CS135

## Program 9

Program TITLE: Alert System

AIM: Design an alert system using flame sensor (use temp sensor for experiment in labacad)

### Hardware Required:

- Arduino
- Piezo
- Temperature Sensor
- LED

### 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);
}
    
```

```
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(buzzer, 1000, 100);
```

```
delay(200);
```

```
}
```

```
else
```

```
{
```

```
Serial.print(degreesC);
```

```
Serial.println("SAFE!");
```

```
delay(200);
```

```
}
```

```
}
```



## Circuit Diagram

