



CODE:

```
int t=2;
```

```
int e=3;
```

```
void setup(){
```

```
  Serial.begin(9600);
```

```
  pinMode(t,OUTPUT);
```

```
  pinMode(e,INPUT);
```

```
  pinMode(12,OUTPUT);
```

```
}
```

```
void loop(){
```

```
  //ultrasonic sensor
```

```
  digitalWrite(t,LOW);
```

```
digitalWrite(t,HIGH);
delayMicroseconds(10);
digitalWrite(t,LOW);
float dur=pulseIn(e,HIGH);
float dis=(dur*0.0343)/2;
Serial.print("Distance is: ");
Serial.println(dis);
//LED ON
if(dis>=100) {
digitalWrite(8,HIGH);
digitalWrite(7,HIGH);
}

//Buzzer For ultrasonic Sensor

if(dis>=100) {
for(int i=0; i<=30000; i=i+10) {
tone(12,i);
delay(1000);
noTone(12);
delay(1000);
}
}

//Temperate Sensor

double a= analogRead(A0);
```

```
double t=((a/1024)*5)-0.5)*100;
  Serial.print("Temp Value: ");
  Serial.println(t);
  delay(1000);

  //LED ON

  if(t>=100) {
    digitalWrite(8,HIGH);
    digitalWrite(7,HIGH);
  }

  //Buzzer for Temperature Sensor
  if(t>=100) {
    for(int i=0; i<=30000; i=i+10) {
      tone(12,i);
      delay(1000);
      noTone(12);
      delay(1000);
    }
  }
  //LED OFF
  if(t<100) {
    digitalWrite(8,LOW);
    digitalWrite(7,LOW);
  }
}
```