



CODE:

```
int t=2;
```

```
int e=3;
```

```
void setup(){
```

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

```
pinMode(t,O
```

```
UTPUT);
```

```
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,HIGH);
```

```
digitalWrite(7,HIGH);
```

```
}
```