

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);
```

```
}
```

```
}
```