

```
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);
```

```
}
```

