

```

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>=200)
```

```
{
```

```
For(int i=0; i<=20000; i=i+10)
```

```
{
```

```
Tone(12,i);
```

```
Delay(1000);
```

```
noTone(12);
```

```
delay(3000);
```

```
}
```

```
}
```

```
//LED OFF
```

```
If(t<100)
```

```
{
```

```
digitalWrite(8,LOW);
```

```
digitalWrite(7,LOW);
```

```
}
```

```
}
```