

```
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);

}

}

```

