

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)
```

```
    //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);
}
}
```

```
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)

//LED ON if(dis >=100)

digitalWrite(8,HIGH);

digitalWrite(7,HIGH); 7/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(AD);

//Temperate Sensor double a= analogRead(AO);

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); 7/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);
```

OUTPUT:

