

```

// C++ code
//
int t=3;
int e=4;

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(9,HIGH);
        digitalWrite(8,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);
        }
    }
}

```

```
//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(9,LOW);  
    digitalWrite(8,LOW);  
}
```