## VSB Engineering College, Karur-639111

## Department of Electronics and Communication Engineering IOT Assignment

**Topic**: Assignment on home automation with sensors and light

**DOMAIN NAME:** Internet Of Things

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## Code:-

```
int t=2;
int e=3:
void setup()
Serial.begin(9600);
pinMode(t,OUTPUT);
pinMode(e,INPUT);
pinMode(12,OUTPUT);
void loop()
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);
if(dis>=100)//(in terms of centimeter)
digitalWrite(8,HIGH);
digitalWrite(7,HIGH);
if(dis > = 100)
for(int i=0; i<=30000; i=i+10)
```

```
tone(12,i);
delay(1000);
noTone(12);
delay(1000);
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)//(in terms of celsius)
digitalWrite(8,HIGH);
digitalWrite(7,HIGH);
if(t>=100)
for(int i=0; i<=30000; i=i+10)
tone(12,i);
delay(1000);
noTone(12);
delay(1000);
if(t<100)
digitalWrite(8,LOW);
digitalWrite(7,LOW);
}
```

## **OUTPUT:-**

