M.KUMARASAMY COLLEGE OF ENGINEERING, Karur-639111

Department of Electronics and Communication Engineering

IOT Assignment

Topic : Assignment on home automation with sensors and light

DOMAIN NAME : Internet Of Things

Name: KAMESH C

MENTOR NAME : KAARTHIK K

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:-