## **IBM**

Name : G.Gowri Reg No : 412319205012 Assignment 1 Smart Home

## Source code:

```
intt=2;
inte=3;
void setup() {
Serial.begin(9600);
pinMode(t,OUTPUT);
pinMode(e,INPUT);
pinMode(12,OUTPUT);
} voidloop(){
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) {
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);
doublet=(((a/1024)*5)-0.5)*100;
Serial.print("Temp Value: "); S
Serial.println(t);
delay(1000);
if(t>=100) {
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);
}
```

## CIRCUIT DIAGRAM:

