Smart home 1

```
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)
{
   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
```

```arduino
double a = analogRead(A 0);
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);

}
}
```