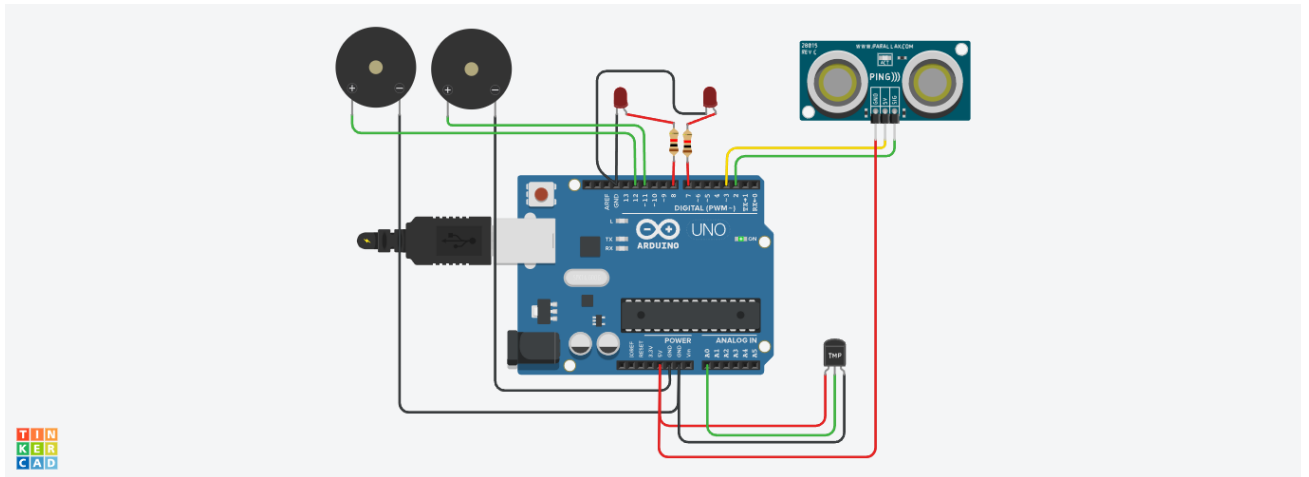


ASSIGNMENT-1

Title: Smart home

Circuit diagram:



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) {
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);  
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);  
}  
}
```