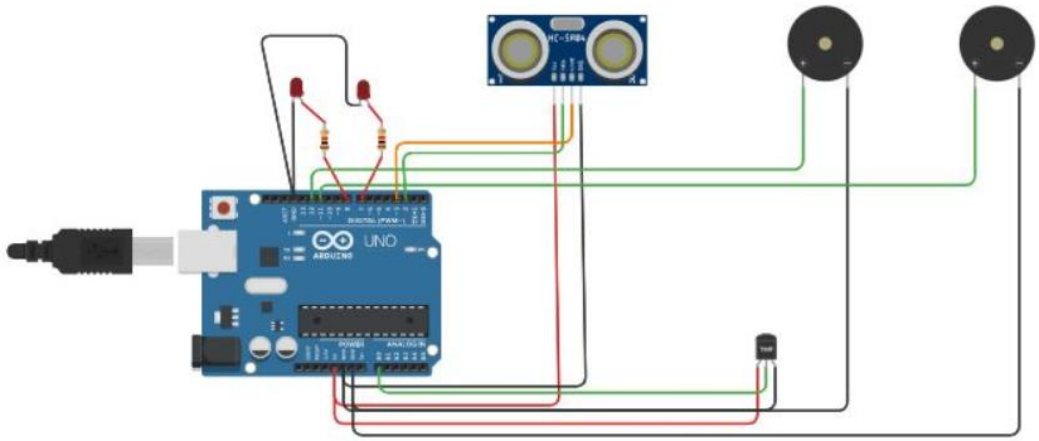
ASSIGNMENT-1

CIRCUIT:



CODE:

```
int t=3;
int e=4;

void setup()
{
  Serial. begin(9600);
  pinMode(t,OUTPUT);
  pinMode(e,INPUT);
  pinMode(6,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(6,i);
delay(1000);
noTone(6);
delay(1000);
}
}




  //Temperate Sensor
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)
 {
   digitalWrite(8,HIGH);
   digitalWrite(7,HIGH);
 }

 //Buzzer for Temperature Sensor
 if(t>=100)
 {
 for(int i=0; i<=30000; i=i+10)
 {
 tone(6,i);
 delay(1000);
 noTone(6);
 delay(1000);
 }
 }

  //LED OFF
 if(t<100)
 {
   digitalWrite(8,LOW);
   digitalWrite(7,LOW);
 }
}
```