OBJECTIVE:

Make a Smart Home in Tinkercad ,using 2 sensors ,LED,Buzzer in single code and circuit

CODE:

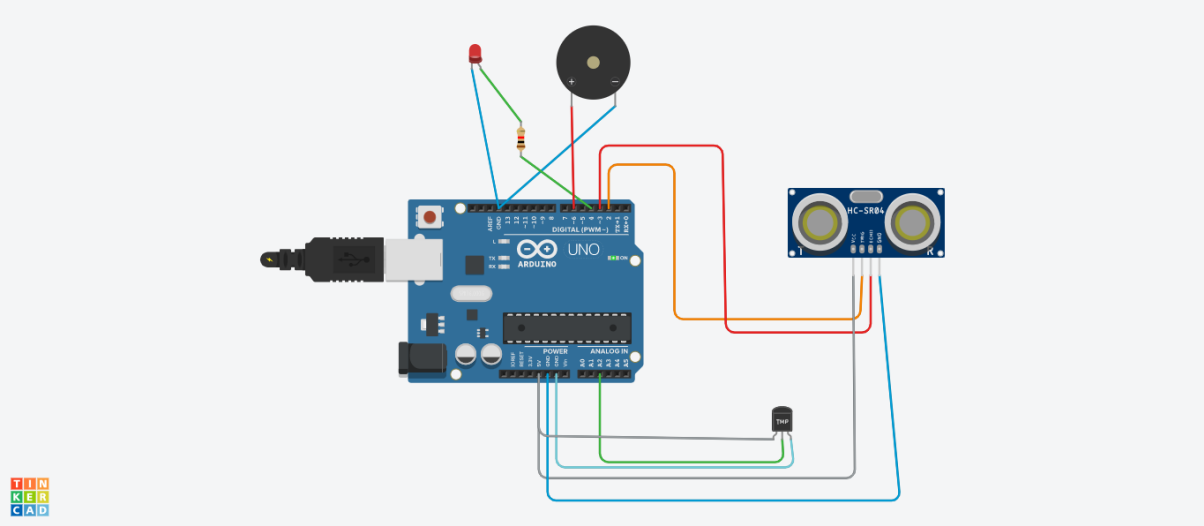
```
int trig=2;
int echo=3;
void setup()
{
  pinMode(trig, OUTPUT);
  pinMode(echo,INPUT);
  Serial.begin(9600);
  pinMode(4,OUTPUT);
  pinMode(6,OUTPUT);
}

void loop()
{
  digitalWrite(trig,LOW);
  digitalWrite(trig,HIGH);
  delayMicroseconds(10);
  digitalWrite(trig,LOW);
  float dur =pulseIn(echo,HIGH);
  float dist=(dur*0.0343)/2;
  Serial.print("distance:");
  Serial.println(dist);
  if(dist>=100)
```

```
{
  digitalWrite(4,HIGH);
}
else
{
  digitalWrite(4,LOW);
}
double a=analogRead(A2);
Serial.print("adc value");
Serial.print(a);
double v=a/1024;
double tvolt=v*5;
Serial.print("temp value voltage:");
Serial.println(tvolt);
double o=tvolt-0.5;
double t=o*100;
Serial.print("temp is:");
Serial.println(t);
if(t>=50)
{
  digitalWrite(6,HIGH);
}
else
{
  digitalWrite(6,LOW);
}
```

}

OUTPUT:



simulation link : https://www.tinkercad.com/things/4u3Mz0vdTwn-exquisite-lahdi-vihelmo/editel?sharecode=ZANPZuNrAdeqby7t7B4kW2EwBP9pi3glfJBUFs5FYmM