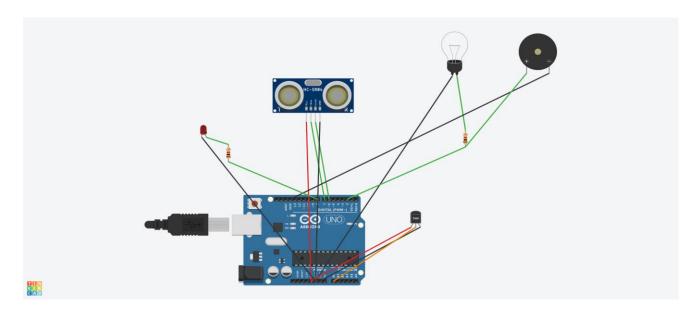
## ASSIGNMENT-1 HOME AUTOMATION

Make a Smart Home in Tinkercad, using 2+ sensors, Led, Buzzer in single code and circuit.



## Code:

```
// C++ code

#define t 7
#define e 6
#define bulb 2

void setup()
{
    Serial.begin(9600);
    pinMode(t,OUTPUT);
    pinMode(e,INPUT);
    pinMode(12,OUTPUT);
    pinMode(bulb,OUTPUT);
}

void loop()
{
    //ultrasonic sensor
    digitalWrite(t,LOW);
    digitalWrite(t,HIGH);
```

```
delayMicroseconds(10);
 digitalWrite(t,LOW);
 float dur=pulseIn(e,HIGH);
 float dis=(dur/2)*0.0343;
 Serial.print("Distance is: ");
 Serial.println(dis);
 if(dis<100){
 digitalWrite(bulb,HIGH);
 }
 else{
 digitalWrite(bulb,LOW);
 }
 //Temperature Sensor
 double a= analogRead(A0);
 double temp=(((a/1024)*5)-0.5)*100;
 Serial.print("Temp Value: ");
 Serial.println(temp);
 delay(1000);
 //LED ON
 if(temp>=100)
  digitalWrite(8,HIGH);
 }
 //LED OFF
 if(temp<100)
  digitalWrite(8,LOW);
}
}
```