**Assignment -1**

Python Programming

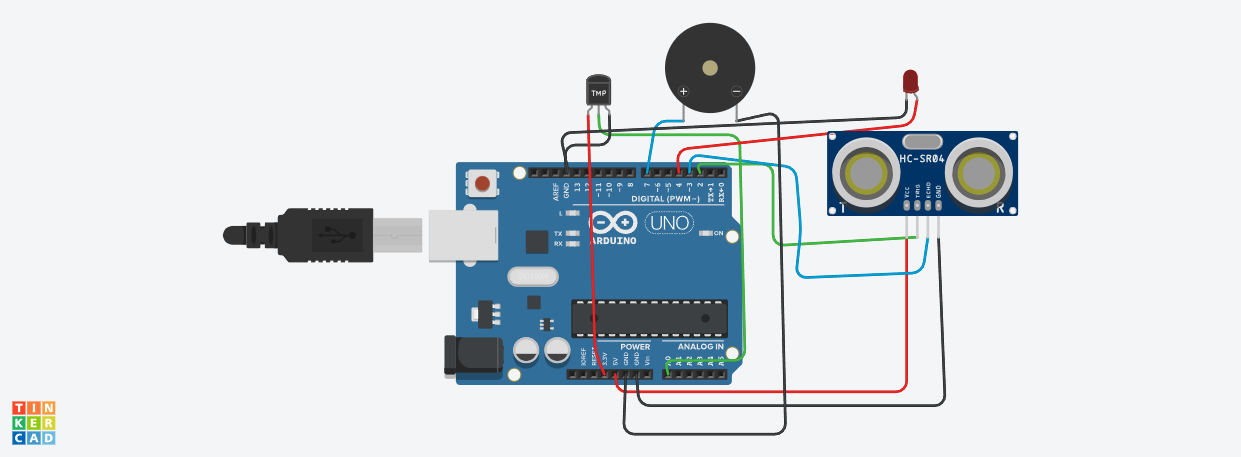
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**Question-1:**

Home automation project using Aruduino, two sensor,buzzer ,light

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| **Solution:**  **const int lm35\_pin=A0;**  **void setup()**  **{**  **pinMode(2,OUTPUT);**  **pinMode(3,INPUT);**  **pinMode(7,OUTPUT);**  **Serial.begin(9600);**  **}**  **void loop()**  **{**  **digitalWrite(2,LOW);**  **digitalWrite(2,HIGH);**  **delayMicroseconds(10);**  **digitalWrite(2,LOW);**  **float dur=pulseIn(3,HIGH);**  **float dis=(dur\*0.034)/2;**    **int temp\_adc\_val;**  **float temp\_val;**  **temp\_adc\_val = analogRead(lm35\_pin);**  **temp\_val = (temp\_adc\_val \* 4.88);**  **temp\_val = ((temp\_val/10)-50);**      **if(dis<=15 && 8<=dis)**  **{**  **Serial.print("temprature=");**  **Serial.println(temp\_val);**  **digitalWrite(4,HIGH);**  **if(temp\_val>38)**  **{**  **digitalWrite(7,HIGH);**  **}**  **digitalWrite(7,LOW);**  **}**  **else**  **{**  **Serial.println("keep distance in 8cm to 15cm");**  **digitalWrite(4,LOW);**  **digitalWrite(7,LOW);**  **}**    **delay(1000);**  **}** |
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**Circuit Diagram:**



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