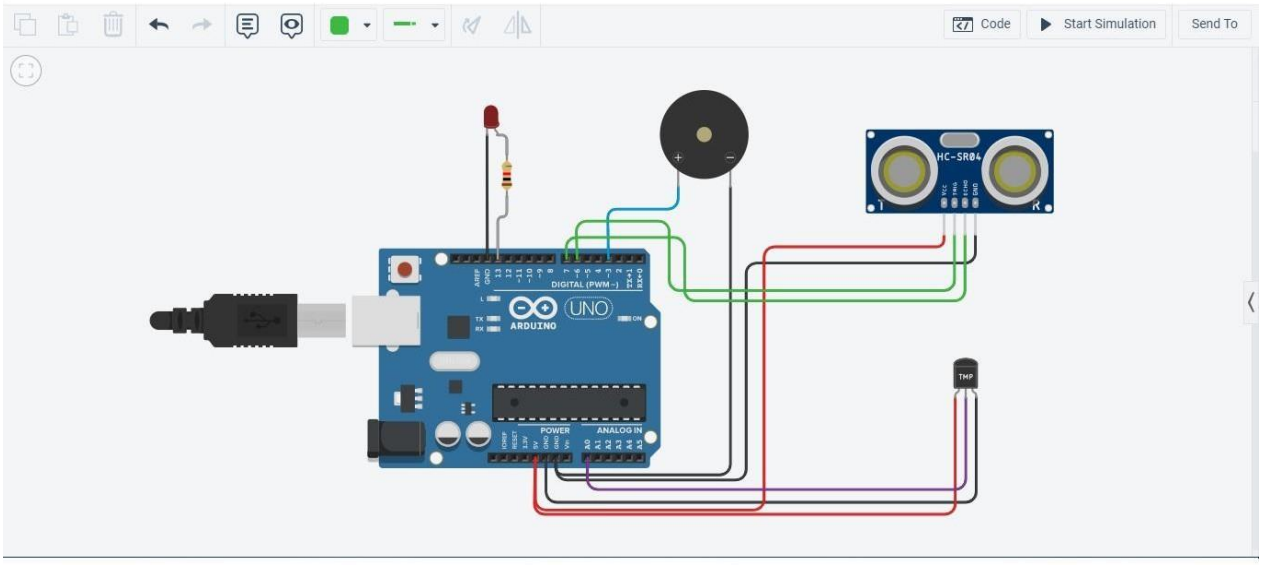
ASSIGNMENT 1

Assignment Date	**15 September 2022**
Student Name	**N Sumanth**
Student Roll No	**110719104036**
Maximum Marks	**2 Marks**

QUESTION: Circuit design Home automation system in Tinkercad.

CIRCUIT DIAGRAM:



SOURCE CODE:

```
const int pingPin = 6;
// Trigger Pin of
Ultrasonic Sensor
                          const int echoPin = 7; //
                          Echo Pin of Ultrasonic
```

```
Sensor
double tempPin=A0;


void setup()

{

 Serial.begin(9600); //
Starting SerialTerminal
 pinMode(LED_BUILTIN, OUTPUT);

 pinMode(3,OUTPUT);

}


void loop()

{

 long distcm,duration;
```

```
double temp;
temp=analogRead(te
mpPin);
temp=(((temp/1024)*5)-0.5)*100;
//converting analog reading to
celcius
//Turn on the buzzer when
temparatureincreases above
70 celcius
if(temp>70)
{
    digitalWrite(3, HIGH);

}
els
e
{   digitalWrite(3,LOW);

}

delay(1000);
pinMode(pingPin,
OUTPUT);
digitalWrite(pingPin,
LOW);
delayMicroseconds(2);
digitalWrite(pingPin,
HIGH);
delayMicroseconds(10)
```

```
;
digitalWrite(pingPin,
LOW);
pinMode(echoPin,
INPUT);
duration = pulseIn(echoPin, HIGH);

distcm = duration*0.0343/2;
// Turns the LED ON when the
water level drops below 100cm.
if(distcm<100)
{
    digitalWrite(LED_BUILTIN,
    HIGH);
}
```

```
els
e

{     digitalWrite(LED_BUILTIN, LOW);


}

}
```