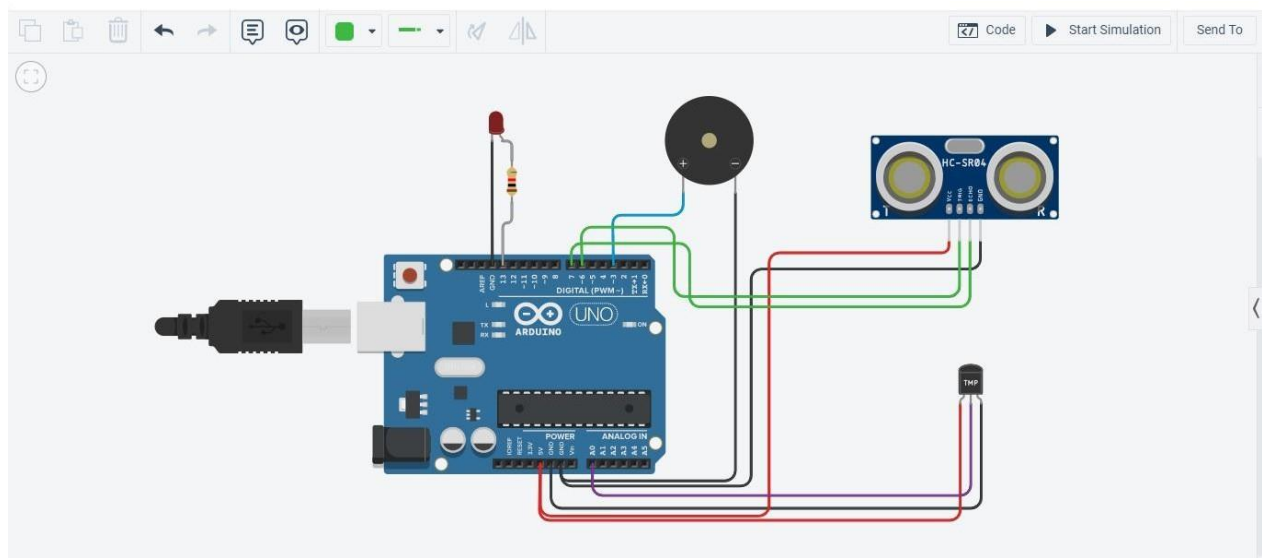


# ASSIGNMENT 1

Assignment Date	15 September 2022
Student Name	K Midhun Surya Kalyan
Student Roll No	110719104028
Maximum Marks	2 Marks

**QUESTION:** Circuit design Home automation system in Tinkercad.

**CIRCUIT DIAGRAM:**



**SOURCE CODE:**

```
const int pingPin = 6;
// TriggerPin of
Ultrasonic Sensor

const int echoPin = 7; //
Echo Pin ofUltrasonic
```

```
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);

}

else
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);

}

}
```