

### Assignment -1

Assignment Date	21 September 2022
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Maximum Marks	2 Marks

Question-1:

Make a smart home in tinkercad using 2+sensors,led,buzzer in single code and circuit

**Solution:**

```
const int pingPin = 6;
// TriggerPin 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(tempPin);
temp=(((temp/1024)*5)-0.5)*100;
//converting analog reading to celcius
//Turn on the buzzer when temperatureincreases above 70 celcius
if(temp>70) {
digitalWrite(3, HIGH
}
else {
```

```

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);
}
Else
{
digitalWrite(LED_BUILTIN,LOW)
}
}

```

### **CIRCUIT:**

