

Assignment -1

Assignment Date	21 September 2022
Student Name	K.Rithick
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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 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(tempPin);
temp=(((temp/1024)*5)-0.5)*100;
//converting analog reading to celcius
//Turn on the buzzer when tempratureincreases 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)  
}  
}
```

