

Assignment -1
Python Programming

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 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)
}
}
```

