**ASSIGNMENT-1**

**SMART HOME USING THINKERCARD**

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| --- | --- |
| Date | 02 OCTOBER 2022 |
| Team ID | **PNT2022TMID19800** |
| Project Name | IOT based smart crop protection system for agriculture |
| Student name | R.Dhivakar |
| Roll number | 19TUIT013 |

**CODING:**

int sensor=4, trig=2, echo=2, light=8, buzz=12;

int dist = 0;

long objectDistance(int a, int b)

{

pinMode(a, OUTPUT); // Clear the trigger

digitalWrite(a, LOW);

delayMicroseconds(2);

digitalWrite(a, HIGH);

delayMicroseconds(10);

digitalWrite(a, LOW);

pinMode(b, INPUT);

return pulseIn(b, HIGH);

}

void setup()

{

Serial.begin(9600);

pinMode(sensor, INPUT);

pinMode(light, OUTPUT);

pinMode(buzz, OUTPUT);

digitalWrite(light, LOW);

}

void loop()

{

//readUltrasonicDistance(7, 7)

dist = 0.01723 \* objectDistance(trig, echo);

Serial.print("Distance is ");

Serial.print(dist);

Serial.println("cm");

if(dist>50 && dist<100)

{

tone(buzz, 50);

delay(2000);

noTone(buzz);

//delay(1000);

if(digitalRead(sensor))

{

digitalWrite(light, HIGH);

delay(2000);

}

}

}

**Output:**

