ASSIGNMENT-1

SMART HOME USING THINKERCARD

Date	02 OCTOBER 2022
Team ID	PNT2022TMID19800
Project Name	SmartFarmer - IoT Enabled Smart Farming Application
Student name	DHINAKARAN S
Roll number	727819TUIT011

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);

  }

}
}
```