

ASSESSMENT-1

ASSESSMENT DATE	19 SEPTEMBER 2022
NAME	MONIKA.D
REGISTER NUMBER	621319106059
MARKS	2 Marks

PROBLEM:

Home Automation using Tinkercad.

CODE:

```
int trigger_pin=2;
int echo_pin=3;
int time;
int distance;
void setup()
{
    Serial.begin(9600);
    pinMode(trigger_pin,OUTPUT);
    pinMode(echo_pin,INPUT);
    pinMode(4,INPUT);
    pinMode(13,OUTPUT);
}
void loop()
{
    digitalWrite(trigger_pin,HIGH);
    delayMicroseconds(10);
    digitalWrite(trigger_pin,LOW);
    time=pulseIn(echo_pin,HIGH);
    distance=(time*0.034)/2;
    if(distance<=10)
    {
        Serial.println("Door open");
        Serial.print("Distance=");
        Serial.println(distance);
        delay(500);
    }
    else{
        Serial.println("Door closed");
        Serial.print("Distance=");
        Serial.println(distance);
        delay(500);
        int p=digitalRead(4);
```

```

if(p)
{
    digitalWrite(13,HIGH);
    Serial.println("motion detected");
}
else
{
    digitalWrite(13,LOW);
    Serial.println("not detected");
}
}
}

```

CIRCUIT SCREENSHOT:

