

ASSIGNMENT-I

Assignment Date	19 September 2022
Student Name	Pavithra P
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Team ID	PNT2022TMID43384
Project Name	Smart Farmer - IoT Enabled Smart Farming Application
Maximum marks	2 marks

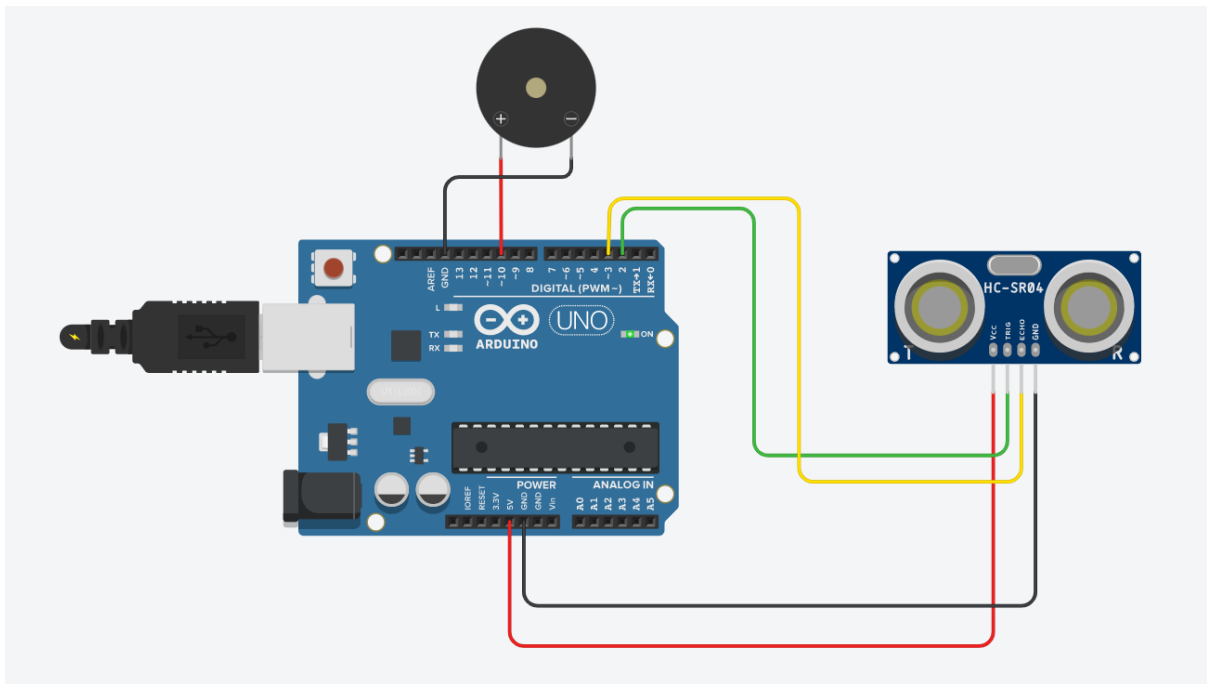
Question: Build a Smart Home using Buzzers and sensors

Code:

```
//door buzzer using ultrasonic sensor
int trigger_pin = 2;
int echo_pin = 3;
int buzzer_pin = 10;
int time;
int distance;
void setup()
{
    Serial.begin (9600);
    pinMode (trigger_pin, OUTPUT);
    pinMode (echo_pin, INPUT);
    pinMode (buzzer_pin, 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);
        digitalWrite (buzzer_pin, HIGH);
        delay (500);
    }
    else {
        Serial.println (" Door closed ");
        Serial.print (" Distance= ");
        Serial.println (distance);
        digitalWrite (buzzer_pin, LOW);
        delay (500);
    }
}
```

Circuit:



Output:

