ASSIGNMENT 4

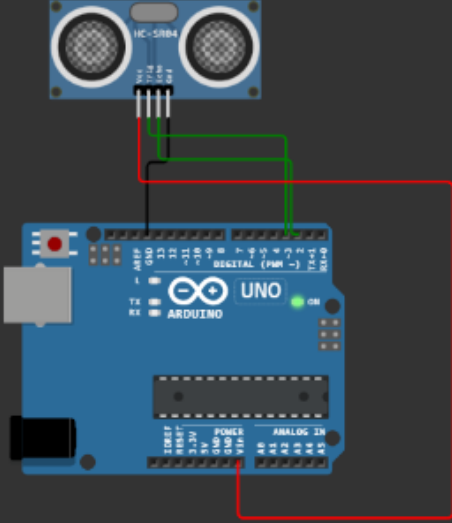| Date	27 October 2022
Team ID	PNT2022TMID18361
Project Name	Smart Farmer-IOT Enabled Smart Farming Application
Maximum Marks	2 Marks

SOLUTION:

Code:

```
#define ECHO_PIN 2
#define TRIG_PIN 3
void setup() {
 Serial.begin(9600);
 pinMode(TRIG_PIN, OUTPUT);
 pinMode(ECHO_PIN, INPUT);
}
float readDistanceCM() {
 digitalWrite(TRIG_PIN, LOW);
 delayMicroseconds(2);
 digitalWrite(TRIG_PIN, HIGH);
 delayMicroseconds(10);
 digitalWrite(TRIG_PIN, LOW);
 int duration = pulseIn(ECHO_PIN, HIGH);
 return duration * 0.034 / 2;
}
void loop() {
 float distance = readDistanceCM();
if(distance <= 100)
{
 Serial.println("person detected ");
}
else{
Serial.print("Measured distance: ");
 Serial.println(readDistanceCM());
}
 delay(1000);
}
```

Simulation:

Measured distance: 395.35
Measured distance: 395.25
Measured distance: 395.25
Measured distance: 395.25
Measured distance: 395.25
Measured distance: 395.27
Measured distance: 395.25

IBM WATSON:

lm9xem.internetofthings.ibmcloud.com/dashboard/devices/browse

IBM Watson IoT Platform

daran942002_ec@mepcoeng.ac.in
ID: lm9xem

Browse   Action   Device Types   Interfaces

Add Device ⊕

> ☐	1234	⌀ Disconnected	Ultrasonic	Device	Oct 26, 2022 8:53 PM
∨ ☑	Ultrasonic_1	● Connected	Ultrasonic	Device	Oct 26, 2022 8:55 PM → •••

Identity   Device Information   **Recent Events**   State   Logs   ✕

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
event_1	{"status":"person detected"}	json	a few seconds ago
event_1	{"status":"person detected"}	json	a few seconds ago
event_1	{"status":"person detected"}	json	a few seconds ago
event_1	{"status":"person detected"}	json	a few seconds ago
event_1	{"status":"person detected"}	json	a few seconds ago

1 Simulation running

Type here to search

27°C   Light rain   ENG   20:57 26-10-2022