# Assignment -4

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| Assignment Date | 25 October 2022 |
| Student Name | Janani R |
| Team ID | PNT2022TMID31424 |
| Project Name | Project-Smart Farmer-IoT Enabled Smart  Farming Application |
| Maximum Marks | 2 Marks |

**Question-1:**

# Write code and connections in wokwi for ultrasonic. Whenever distance is less than 100 cms send

**“alert” to ibm cloud and display in device recent events.**

**Solution:**

#define ECHO\_PIN 2

#define TRIG\_PIN 3

#define organization = "mmbh4c" #define deviceType = "Ultrasonic" #define deviceId = "pga460\_sensor" #define authMethod = "use-token-auth" #define authToken = "123456789"

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 ");

}

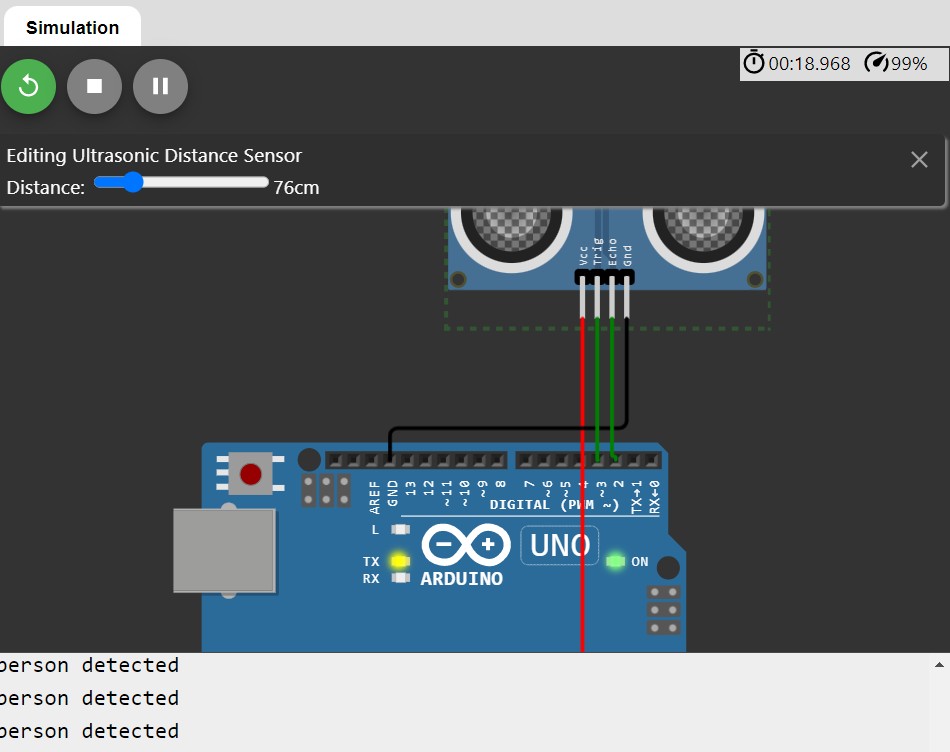
else{

Serial.print("Measured distance: "); Serial.println(readDistanceCM());

}

delay(1000);

}



**Wokwi Link:** https://wokwi.com/projects/346094692918624851

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| **IBM Cloud**  Device Recent Events |
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