

ASSIGNMENT- 4

Assignment Date	24 October 2022
Student Name	KIRIVARSHAN S
Student Roll Number	311019205702
Maximum Mark	2 Marks

Question:

Write code and connections in wokwi for ultrasonic. And for sending alert

Program:

```
#define ECHO_PIN 2
#define TRIG_PIN 3

void setup() {
  Serial.begin(9600);
  pinMode(TRIG_PIN, OUTPUT);
  pinMode(ECHO_PIN, INPUT);
}

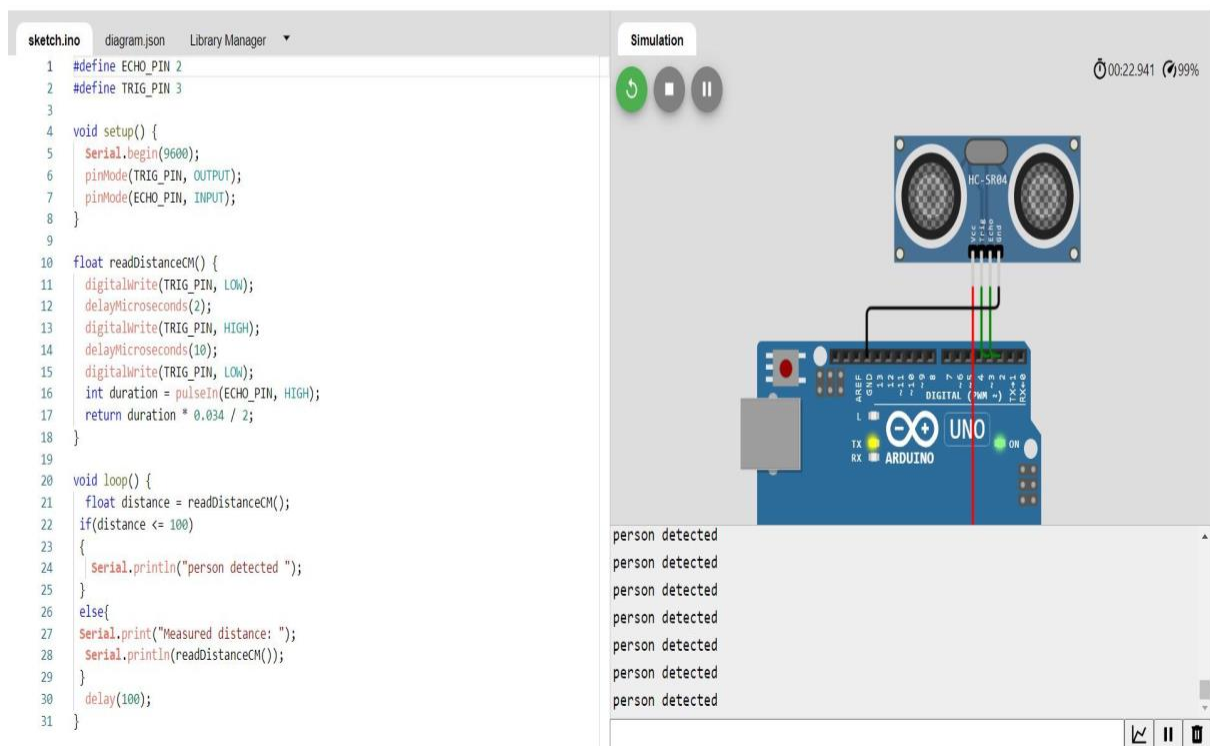
float readDistanceCM() {
  digitalWrite(TRIG_PIN, LOW);
  delayMicroseconds(2);
  digitalWrite(TRIG_PIN, HIGH);
  delayMicroseconds(10);
  digitalWrite(TRIG_PIN, LOW);
  int duration = pulseIn(ECHO_PIN, HIGH);
  return duration * 0.034 / 2;
}

void loop() {
  float distance = readDistanceCM();
  if(distance <= 100)
  {
    Serial.println("person detected ");
  }
}
```

```

else{
Serial.print("Measured distance: ");
Serial.println(readDistanceCM());
}
delay(100);
}

```



Wokwi Link: <https://wokwi.com/projects/346965903633547858>

IBM Cloud

The screenshot displays the IBM Cloud IoT Platform console. At the top, there are tabs for 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar labeled 'Search by Device ID' is present. A table lists devices with columns for Device ID, Status, Device Type, and Class ID. The device 'Ultrasonic_1' is selected, and its details are shown in a sidebar. The details include Device ID, Device Type, Date Added, Added By, and Connection Status. The connection status is 'Disconnected' with additional information about the last connection.

Device ID	Status	Device Type	Class ID
1234	Disconnected	SmartFarmer	Device
Ultrasonic_1	Disconnected	Ultrasonic	Device
pga460_sensor	Disconnected	Ultrasonic	Device

Device Details for Ultrasonic_1:

- Device ID:** Ultrasonic_1
- Device Type:** Ultrasonic
- Date Added:** Oct 25, 2022 4:25 PM
- Added By:** 820419205501@smartinternz.com
- Connection Status:** Disconnected
 - Last Connected: Oct 25, 2022 4:28 PM
 - Client Address: 42.109.148.176 SecureToken
 - Duration: 2 minutes
 - Data Transferred: 2.7 KB