Assignment -4

Assignment Date	26 October 2022
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Project Name	Smart Farmer-IoT Enabled Smart Farming Application
Maximum Marks	2 Marks

Write code and connections in wokwi for the ultrasonic sensor. Whenever the distance is less than 100 cms send an "alert" to the IBM cloud and display in the device recent events.

```
#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);
}
```