Assignment -4

Assignment Date	6 th November 2022		
Team ID	PNT2022TMID33827		
Project Name	Smart Farmer-IoT Enabled SmartFarming		
	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 = "fkxdqs"
#define deviceType = "Arduino"
#define deviceId = "1200"
#define authMethod = "use-token-auth"
#define authToken = "00000000"
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(readDistanceC
       M());
      }
       delay(1000);
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1 #define ECHO_PIN 2

2 #define TRIG_PIN 3

void setup() {

4 Serial.begin(9600);

5 pinMode(TRIG_PIN, UUTPUT);

6 pinMode(ECHO_PIN, INPUT);

7 }
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           }
float readDistanceCM() {
digitalWrite(TRIG_PIN, LOW);
delayMicroseconds(2);
dgitalWrite(TRIG_PIN, HIGH);
delayMicroseconds(10);
ddigitalWrite(TRIG_PIN, LOW);
int duration = pulseIn(ECHO_PIN, HIGH);
return duration * 0.034 / 2;
}
           }
void loop() {
float distance = readDistanceCM();
if(distance <= 100)</pre>
                                                                                                    Measured distance: 395.25
           {
Serial.println("person detected ");
                                                                                                    Measured distance: 395.27
                                                                                                    person detected
           }
else{
Serial.print("Measured distance: ");
Serial.println(readDistanceCM());
                                                                                                    person detected
           ;
delay(1000);
}
                                                                                                                                                                                        Type here to search
```

Wokwi Link: https://wokwi.com/projects/347558633522856532