Assignment -4

Assignment Date	6 th November 2022
Team ID	PNT2022TMID33827
Project Name	Smart Farmer-IoT Enabled SmartFarming
	Application
Maximum Marks	2 Marks

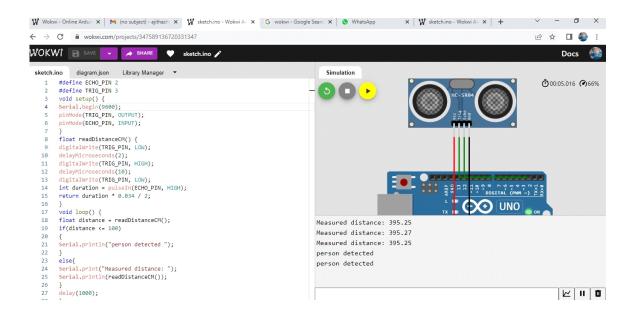
Question-1:

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 =
 readDistanceC
 M();if(distance
 <= 100)
 {
  Serial.println("person detected ");
 }
 else{
 Serial.print("Measur
 eddistance: ");
 Serial.println(readDistanceC
 M());
 }
 delay(1000);
}
```



Wokwi Link: https://wokwi.com/projects/347589136720331347