Assignment -4

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

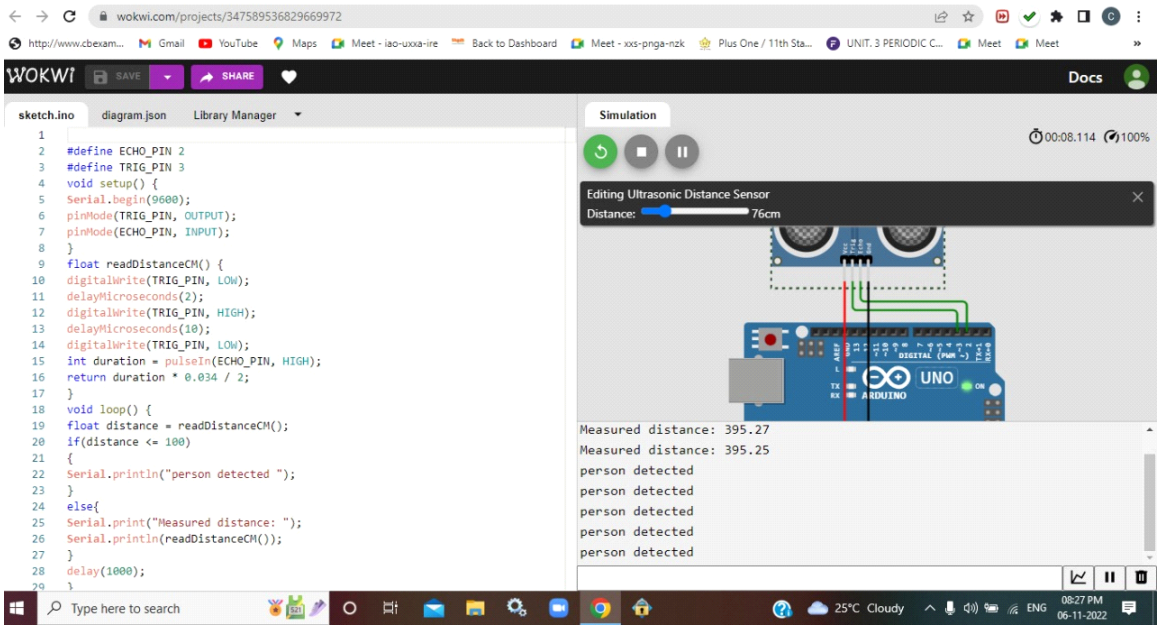
Question-1:

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/347589536829669972