

Assignment date	6 th November 2022
Team ID	PNT2022TMID33827
Project Name	Smart Farmer-IOT Enabled SmartFarming
Maximum Marks	2 Marks

Question-1

Write code and connections in wokwi for ultrasonic. Whenever distance is less than 100 cms send

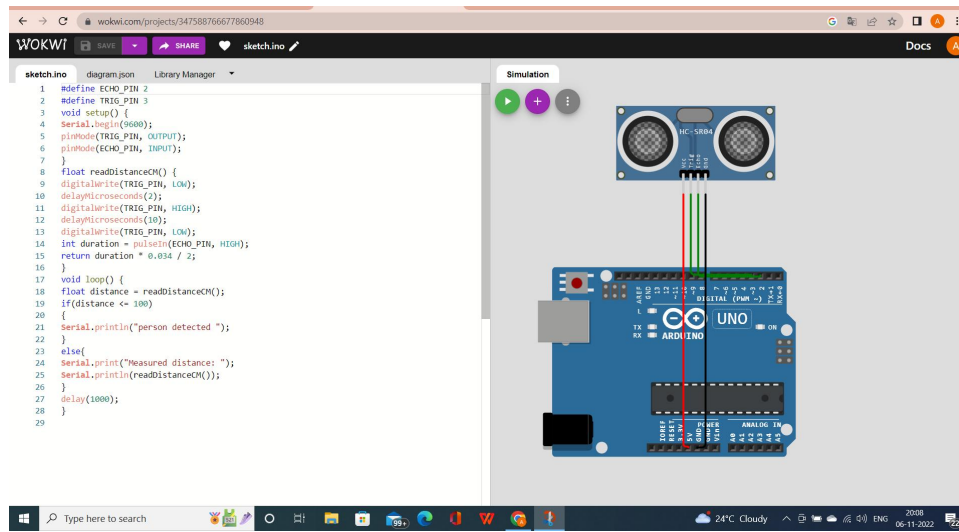
“alert” to ibm cloud and display in device recent events.

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);  
}
```



<https://wokwi.com/projects/347588766677860948>