**ASSIGNMENT 4:**

***Question-1:***

***Write code and connections in wokwi for ultrasonic. Whenever distance is less than 100 cm’s send***

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

#define ECHO\_PIN 2

#define TRIG\_PIN 3

#define organization =”8ae4tj”

#define deviceType="Arduino"

#define deviceId =”202004”

#define authMethod ="use-token-auth"

#define authToken =”12345678910”

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);

}

WOKWI PROJECT LINK: <https://wokwi.com/projects/347048462117765715>





