**Nadar Saraswathi College of engineering and technology**

**ASSIGNMENT-4**

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| Team ID | PNT2022TMID48844 |
| Project Name | Project-Smart Farmer-IOT Enabled Smart Farming Application |
| Assignment | 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 =”e03g10” #define deviceType=” Arduino” #define deviceId =”2502”

#define authMethod ="use-token-auth"

#define authToken =”12345678” 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);

}

