## Assignment -4

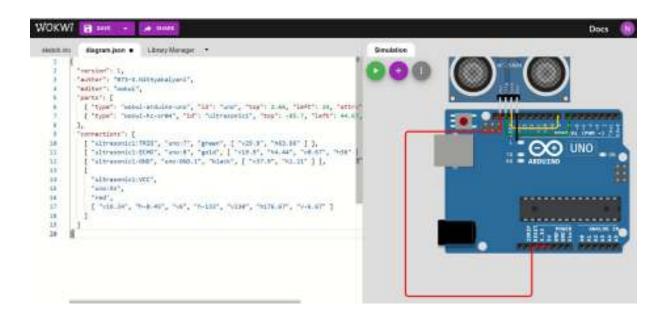
Assignment Date	30 OCTOBER 2022
Student Name	V.HARSHINI
Student Roll Number	913119106032
Maximum Marks	2 Marks

**PROBLEM STATEMENT: IOT BASED** Signs With Smart Connectivity For Better Road Safety

QUESTION: Write code and connection in wokwi for ultrasonic sensor. Whenever distance is less than 100cm and send "alert" to ibm cloud and display in device recent events.

## **WOKWI LINK:**

https://wokwi.com/projects/347620137102213714



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  ske,ch.lno dlllgram )son lll:ory Manager
                                                                                                                                   Slmulation
           const int TRIG_PIN • 7;
const int ECHO_Prn • a;
                                                                                                                                                                                                                               Canan Can
                                                                                                                                800
             // Anything over 409 c* (5809 us pulse) is 'out of range"
const unsigned int MAX_DIST * 5809;
             void setup() {
              pinHode(TRJG_PIN, OOTPUT);
dilltalWrlte(TRJG_PUT, LCW);
pinHode(ECHO_Prn, INPUT);
S_rial. ♦ lln(9600);
            tdefine ORG "bb2bpw"
edefine OEVICE_TYPE "ultrasonic"
fdefine OEVICE_TO "123"
edefine TOKEN "12345678"
            char server[] - ORG ··...ssagrng.intermetofthings.ib.,cloud.c0U0°; char pubTopic1[] * "iot-2/evt/status1/fmt/json"; char pubTopic2[] * 'iot-2/e,j/test/fmt/string"; char uthMetOd[] * 'iose-token-auth"; char token[] * TOKEN; chllr clientId[) * "d:" ORG ·.* OEVICE_TYPE ":" OEVICf_IO;
     11
            vo∳:s: = :)1:ng t1,
           unsigned long t2,
unsillned long pulse width;
                                                                                                                                                                                                                                         i,.., II "DI
 O BM-EPBUIBM-Prcj-kt-441-165 X W WdcometoWoh,,!IWoKWIOc x W ,kot,hJrl0 Wokv.,Ardu,r.oand X "P BMWauonIoTPlatfarm
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WOKWI
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  sketch.ino diagram json library Manager
                                                                                                                                   Simulotion
            const int TRJG_PIN * 7;
                                                                                                                                                                                                                                (!}00:10.433 (iJ57%
            const int EOO PIN . 8;
            // Anything over 400 co (5800 us pulse) is "out of range"
            const unsigned int KAX_OIST • 5800;
                                                                                                                                o,stana>: — 75cm
            void setun() {
              pinMode(TRIG Prn, OUTPUT);
              digitahlrite(TIUG_PJN, LI),/);
              pi (EO()_PJN, INP\!T),
serial.begin(9600);
     11
            tdefine 0LG "bb2bpw"
tdefine 0EVICE_TYPE "ultrasonic"
tdefine 0EVICE_IO "123"
tdefine 1(Il(EN "12345678"
     19
           char server] J * 0LG ".messaging.intermetofthings.ibllcloud.cce":
char publopict[ J * "iot-2/evt/strust/lnt/Json";
char publopic2[) * "iot-2/cmd/testlf*tfstring";
char authHethod[] * "use-tokeo-ectn":
                                                                                                                              Alert
                                                                                                                               76.07 (ffl
           char token[] • 1(ll(EN;
char client1d[] _ "d:" ORG -r- OEVICE_TYPE -.- OEVICE_IO;
     <sup>27</sup><sub>28</sub> vo≬:s: = :)1:ng t1;
              unsigned long t2;
           unsigned long pulse_width;
```

## IBM CLOUD:

