ASSIGNMENT 4

NAME: AKSHAYA J

Qn: Write code and connections in wokwi for the ultrasonic sensor.

Whenever the distance is less than 100 cms send an "alert" to the IBM cloud **and display in the device recent events.**

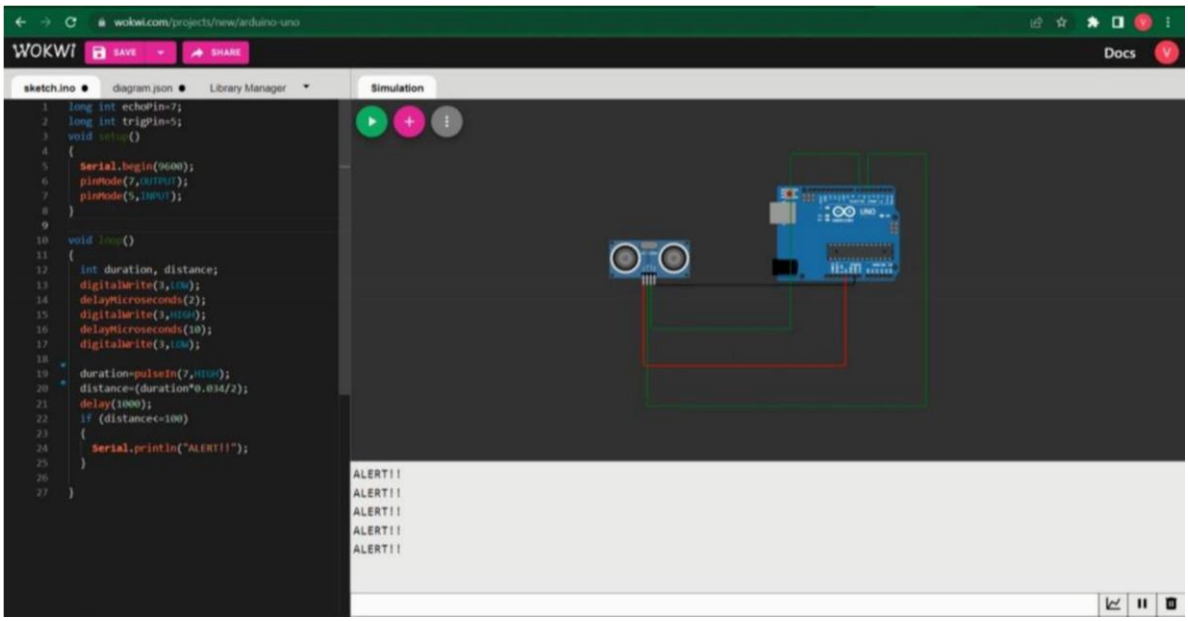
Upload document with wokwi share link and images of IBM cloud

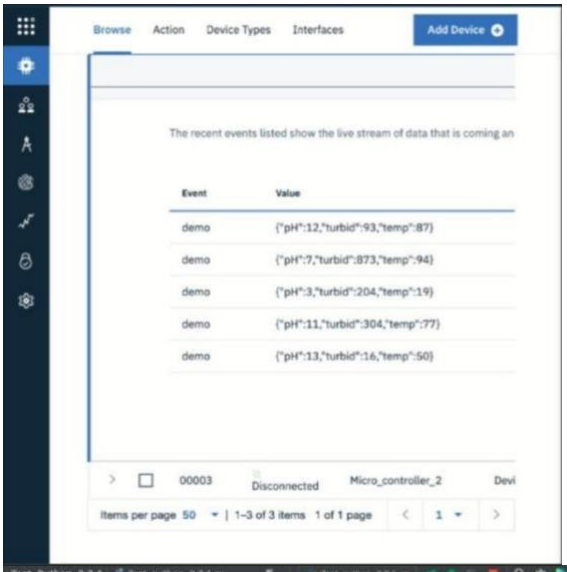
LINK: https://wokwi.com/projects/new/arduino-uno

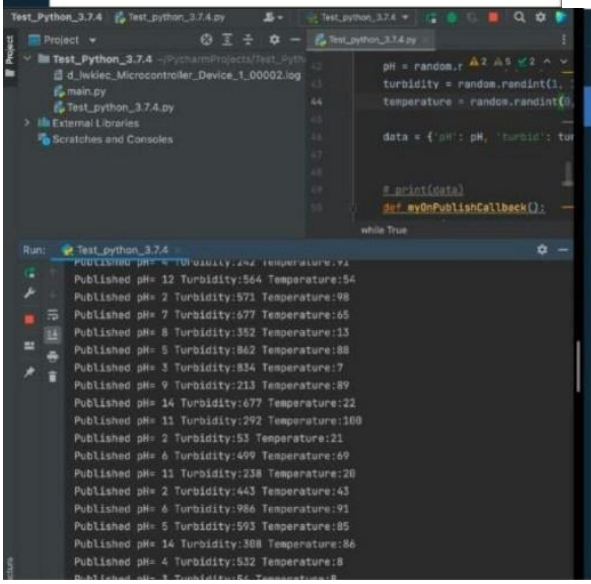
CODE:

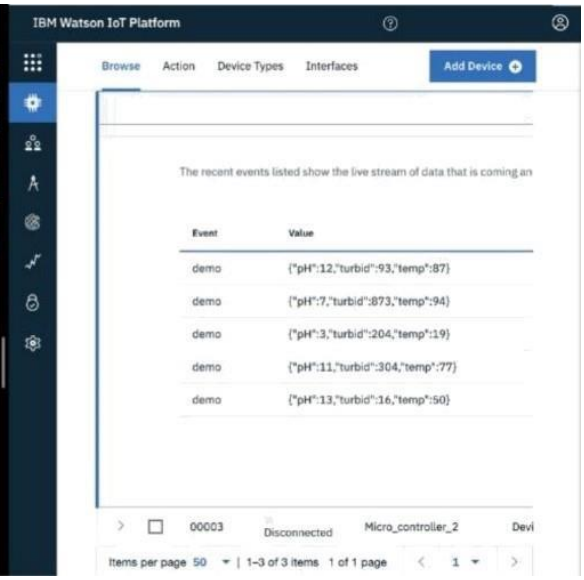
```
long int echoPin=7;
long int trigPin=5;
void setup()

  Serial.begin(9600);
  pinMode(7,OUTPUT);
  pinMode(5,INPUT);



void loop()

  int duration, distance;
  digitaIWrite(3,LOW);
  deIayMicroseconds(2);
  digitaIWrite(3,HIGH);
  deIayMicroseconds(10);
  digitaIWrite(3,LOW);

  duration=puIseIn(7,HIGH);
  distance=(duration*0.034/2);
  delay(1000); if
  (distance<=100)

    Serial.printIn("ALERT!!”);
```

SIMULATIONS:




Browse
Action
Device Types
Interfaces
Add Device
The recent events listed show the live stream of data that is coming an
Event
Value
demo
{"pH":12,"turbid":93,"temp":87}
demo
{"pH":7,"turbid":873,"temp":94}
demo
{"pH":3,"turbid":204,"temp":19}
demo
{"pH":11,"turbid":304,"temp":77}
demo
{"pH":13,"turbid":16,"temp":50}
00003
Disconnected
Micro_controller_2
Devi
Items per page 50
1–3 of 3 items
1 of 1 page


Test_Python_3.7.4
Project
Test_Python_3.7.4
d_lwkiec_Microcontroller_Device_1_00002.log
main.py
Test_python_3.7.4.py
External Libraries
Scratches and Consoles
while True
Run:
Published pH= 12 Turbidity:564 Temperature:54
Published pH= 2 Turbidity:571 Temperature:98
Published pH= 7 Turbidity:677 Temperature:65
Published pH= 8 Turbidity:352 Temperature:13
Published pH= 5 Turbidity:862 Temperature:88
Published pH= 3 Turbidity:834 Temperature:7
Published pH= 9 Turbidity:213 Temperature:89
Published pH= 14 Turbidity:677 Temperature:22
Published pH= 11 Turbidity:292 Temperature:100
Published pH= 2 Turbidity:53 Temperature:21
Published pH= 6 Turbidity:499 Temperature:69
Published pH= 11 Turbidity:238 Temperature:20
Published pH= 2 Turbidity:443 Temperature:43
Published pH= 6 Turbidity:986 Temperature:91
Published pH= 5 Turbidity:593 Temperature:85
Published pH= 14 Turbidity:308 Temperature:86
Published pH= 4 Turbidity:532 Temperature:8


IBM Watson IoT Platform
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