ASSIGNMENT-4

NAME: BHAVANI B

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;
  digitalWrite(3,LOW);
  delayMicroseconds(2);
  digitalWrite(3,HlGH);
  delayMicroseconds(10);
  digitalWrite(3,LOW);

  duration=pulseln(7,HIGH);
  distance=(duration*O.034/2
  ); delay(1000); if
  (distance<=100)
```

Serial.println("ALERT!!");

SIMULATIONS:

WOKWI Docs

sketch.ino • diagram tson L ibrarv Manager Simulation

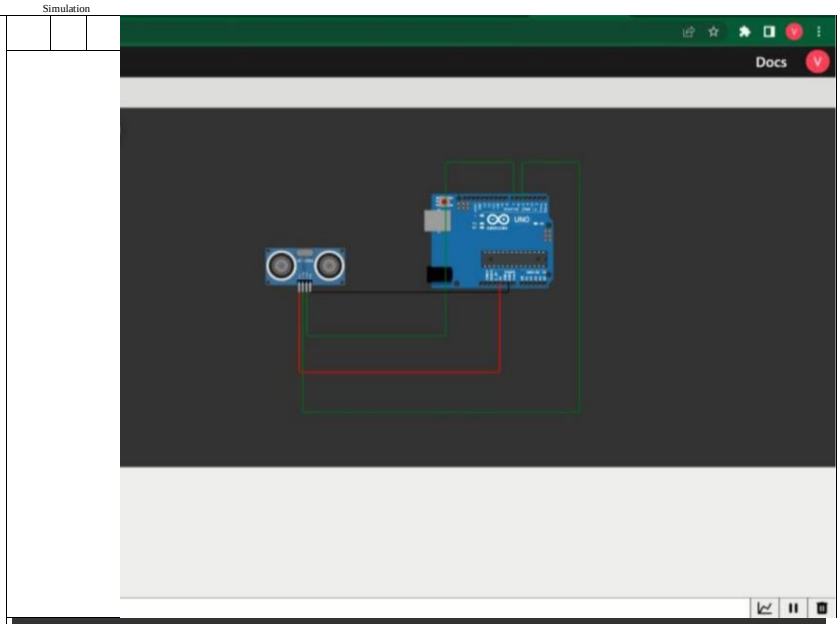
lone ht Pin•S;

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

void loop()
{
  int duration, distance;
  digitalWrite(3,LOW);
  delayMicroseconds(2);
  digitalWrite(3,HIGH);
  delayMicroseconds(10);
  digitalWrite(3,LOW);

  duration=pulseIn(7,HIGH);
  distance=(duration*0.034/2);
  delay(1000);
  if (distance<=100)
  {
   Serial.println("ALERT!!");
  }

}
```




```
ALERT!!
ALERT!!
```

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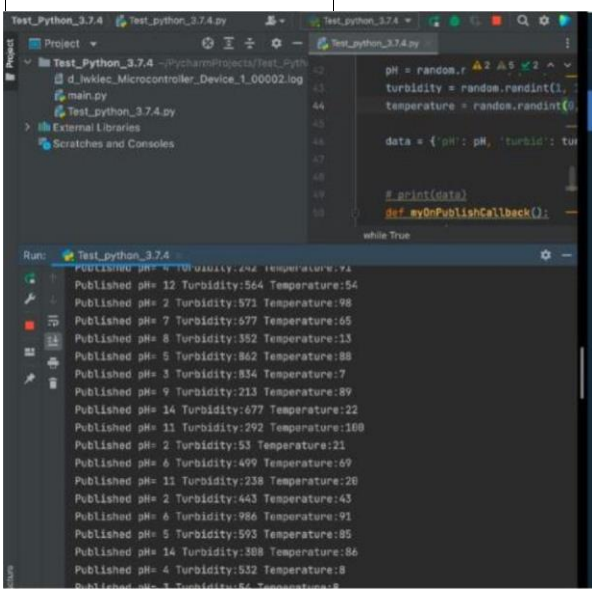
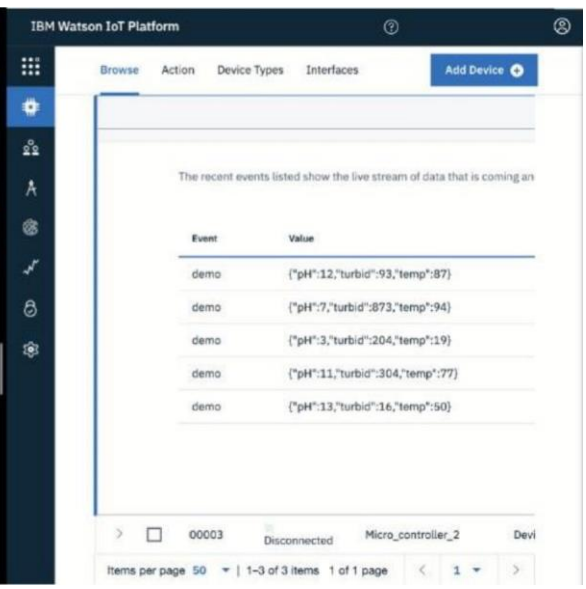
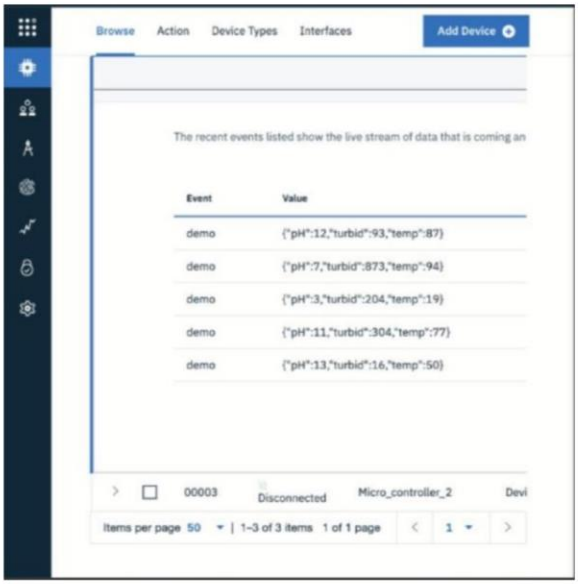
ALERT!






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
1