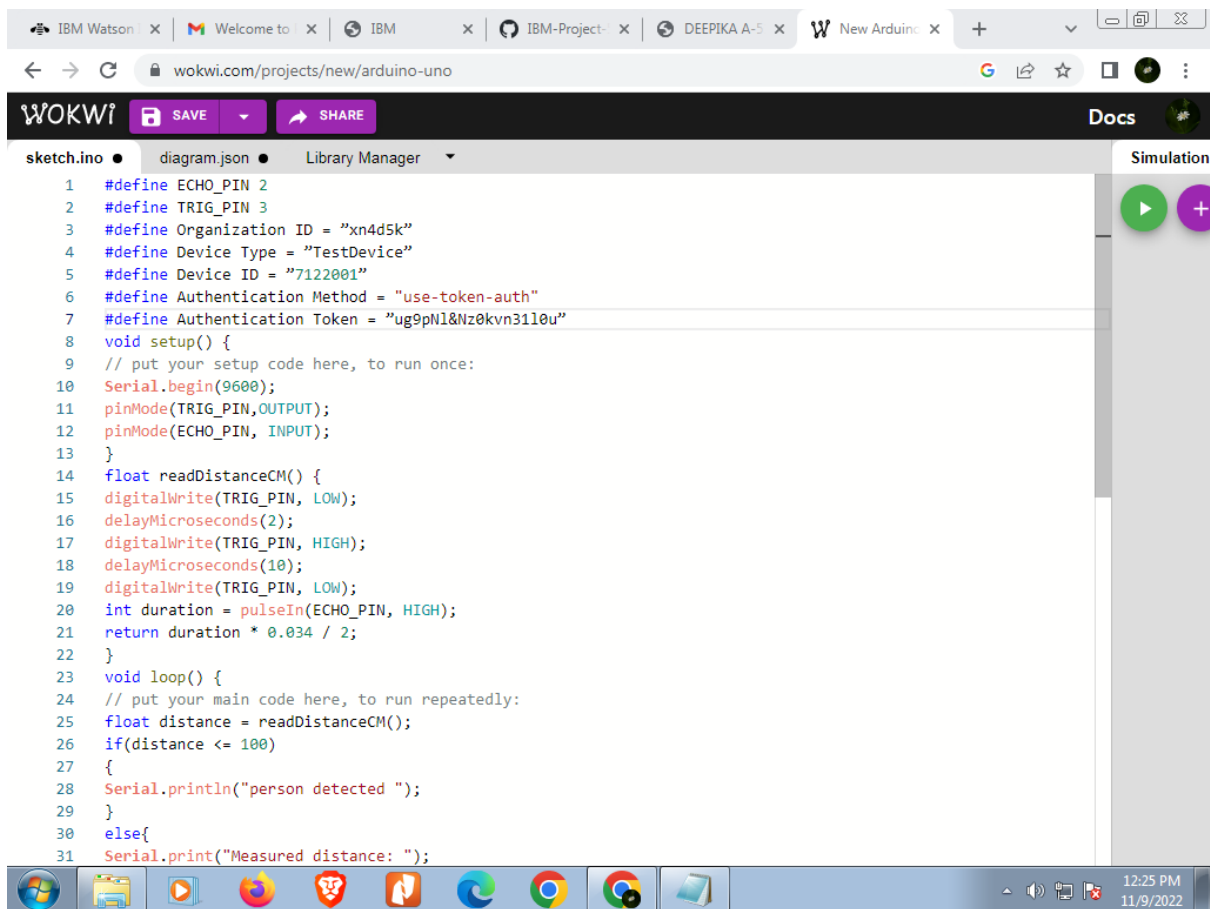
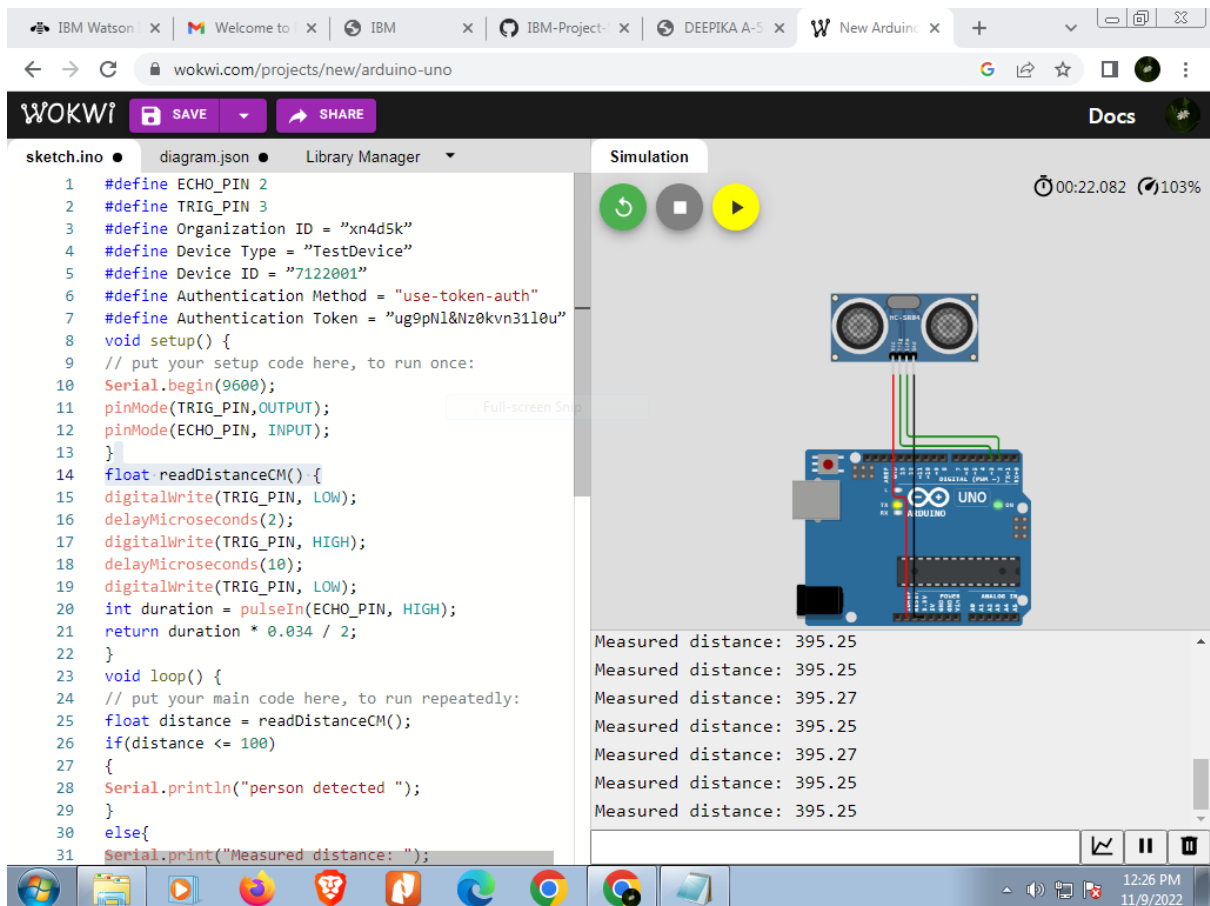
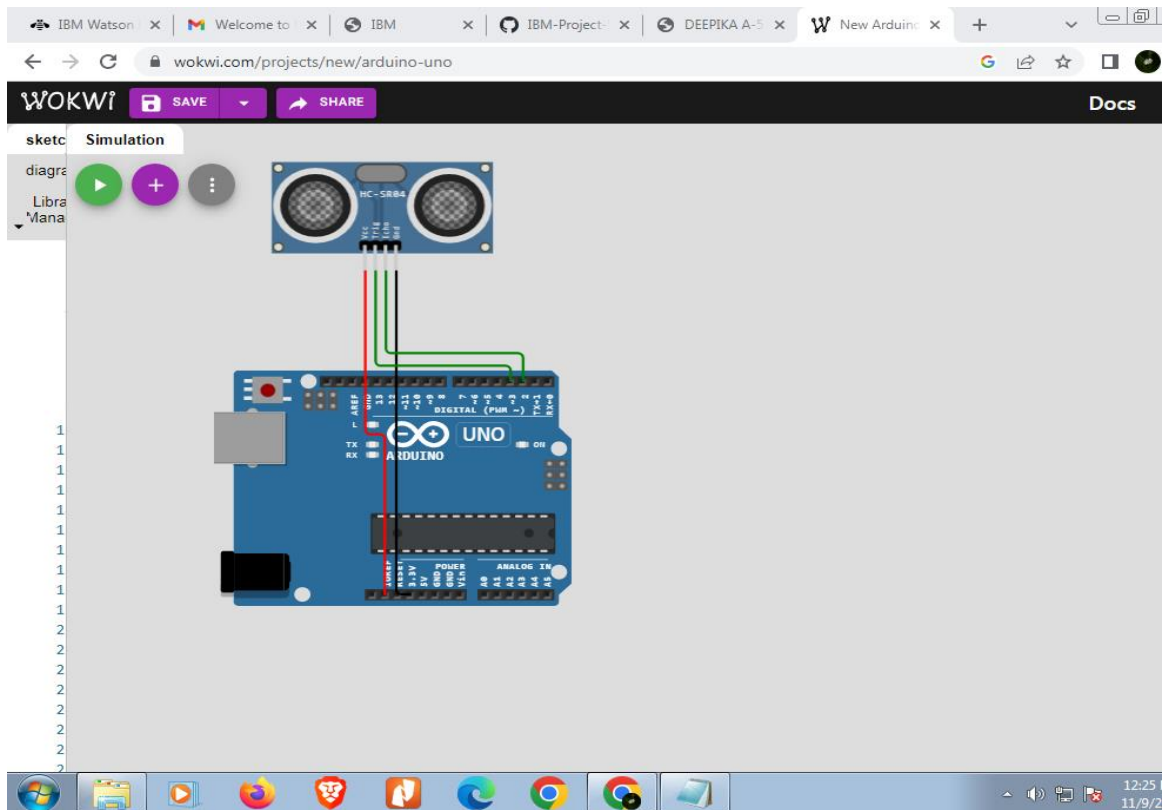


#### ASSIGNMENT-4

**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.**

```
#define ECHO_PIN 2
#define TRIG_PIN 3
#define Organization ID = "xn4d5k"
#define Device Type = "TestDevice"
#define Device ID = "7122001"
#define Authentication Method = "use-token-auth"
#define Authentication Token = " ug9pNl&Nz0kvn31l0u"
void setup() {
  // put your setup code here, to run once:
  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() {
  // put your main code here, to run repeatedly:
  float distance = readDistanceCM();
  if(distance <= 100)
  {
    Serial.println("person detected ");
  }
  else{
    Serial.print("Measured distance: ");
    Serial.println(readDistanceCM());
  }
  delay(1000);
}
```





IBM Watson IoT Platform

Welcome to Project! Delighted to

IBM

xn4d5k.internetofthings.ibmcloud.com/dashboard/devices/browse

510819106301@smartinternz.com  
ID: xn4d5k

Browse

Action

Device Types

Interfaces

Search by device ID

Device Simulator

Add Device

<input type="checkbox"/>	Device ID	Status	Device Type	Class ID	
<input checked="" type="checkbox"/>	7122001	Disconnected	TestDevice	Device	→ ...

Identity

Device Information

Recent Events

State

Logs

×

Device ID

7122001

Device Type

TestDevice

Date Added

Nov 9, 2022 11:00 AM

Added By

510819106301@smartinternz.com

Connection Status

Disconnected

Items per page 50 | 1–1 of 1 item

1 of 1 page

1

1 Simulation running

12:27 PM  
11/9/2022

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ID: xn4d5k

Browse

Action

Device Types

Interfaces

Add Device +

7122001

Disconnected

TestDevice

Device

Identity

Device Information

Recent Events


State

Logs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
event_1	{"version":1,"author":"MONIKA","editor":"wokwi"}	json	a few seconds ago
event_1	{"version":1,"author":"MONIKA","editor":"wokwi"}	json	a few seconds ago
event_1	{"version":1,"author":"MONIKA","editor":"wokwi"}	json	a few seconds ago
event_1	{"version":1,"author":"MONIKA","editor":"wokwi"}	json	a few seconds ago
event_1	{"version":1,"author":"MONIKA","editor":"wokwi"}	json	a few seconds ago

1 Simulation running



12:12 PM

11/9/2022

