Assignment -4

DATE	**2 NOVEMBER 2022**
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STUDENT ROLL NUMBER	**815119106030**
MAXIMUM MARKS	**2 MARKS**

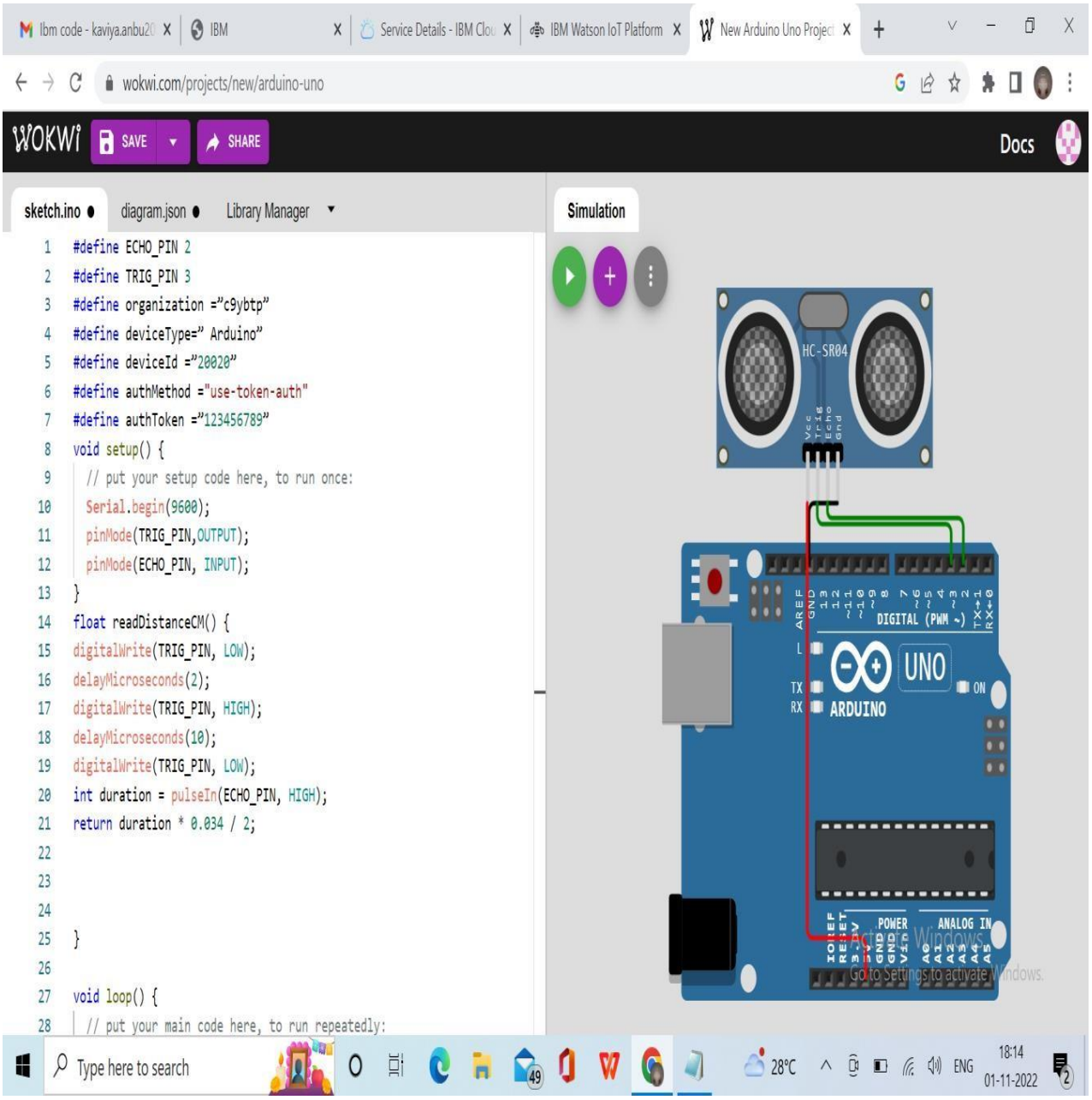
Question-1: Write code and connections in wokwi for ultrasonic sensor. Whenever distance is less than 100 cms send “alert” to ibm cloud and display indevice recent events.

Solution:

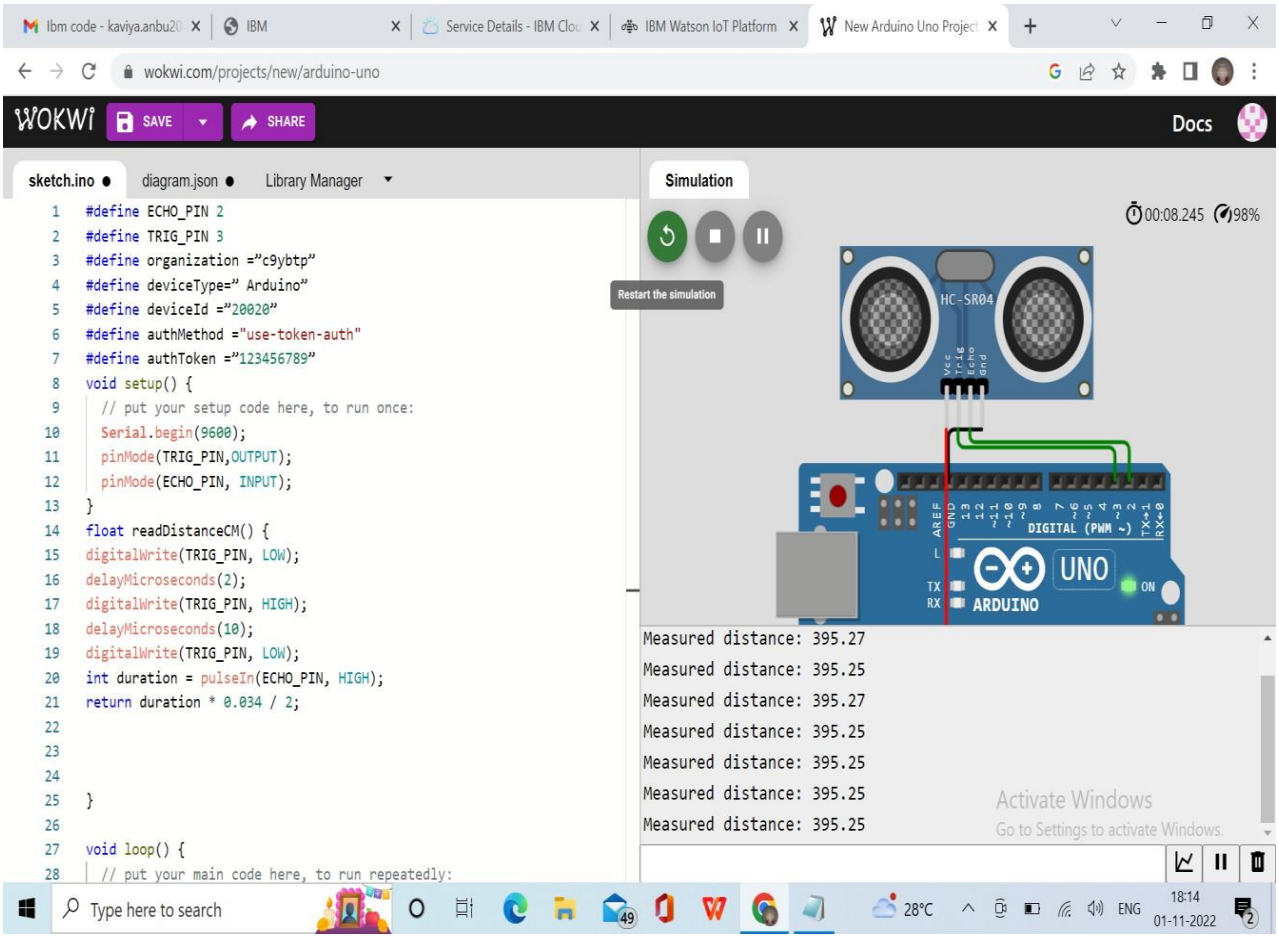
```
#define ECHO_PIN 2
#define TRIG_PIN 3
#define  organization  =”c9ybtp”
#define deviceType=” Arduino”
#define deviceId =”20020”
#define authMethod ="use-token-auth"
#define authToken  =”123456789”
void setup() {
  // put your setup code here, to run once:
  Serial.begin(9600);
  pinMode(TRIG_PIN,OUTPUT);
  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);


}
```

Intput :



Output:



Wokwi Link: https://wokwi.com/projects/347128758734422612

IBM CLOUD

Device Recent Events