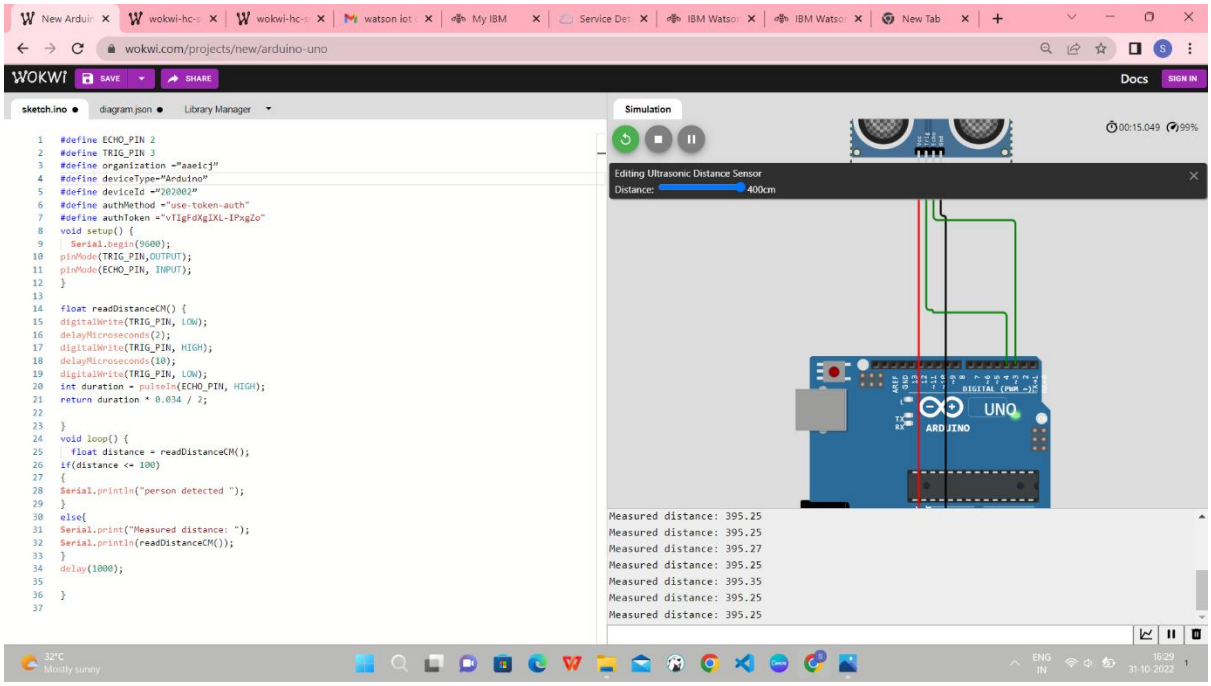
ASSIGNMENT-4

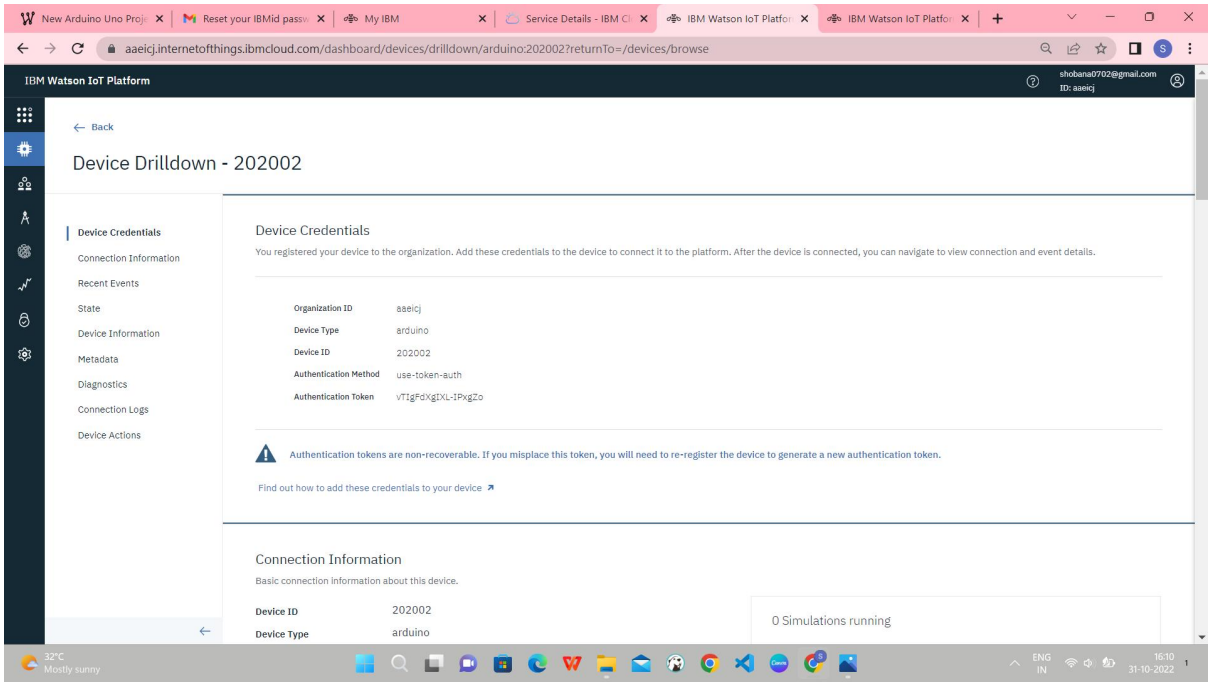
Question-1:
Write code and connections in wokwi for ultrasonic. Whenever distance is less than 100 cm's send "alert" to IBM cloud and display in device recent events.

```
#define ECHO_PIN 2
#define TRIG_PIN 3
#define organization =”aaeicj”
#define deviceType=”Arduino”
#define deviceId =”202002”
#define authMethod ="use-token-auth"
#define authToken ="vTIgFdXgIXL-IPxgZo"
void setup() {
  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() {
  float distance = readDistanceCM();
if(distance <= 100)
{
Serial.println("person detected ");
}
else{
Serial.print("Measured distance: ");
Serial.println(readDistanceCM());
}
delay(1000);

}
```

WOKWI PROJECT LINK: https://wokwi.com/projects/347048462117765715

ASSIGNMENT-4





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