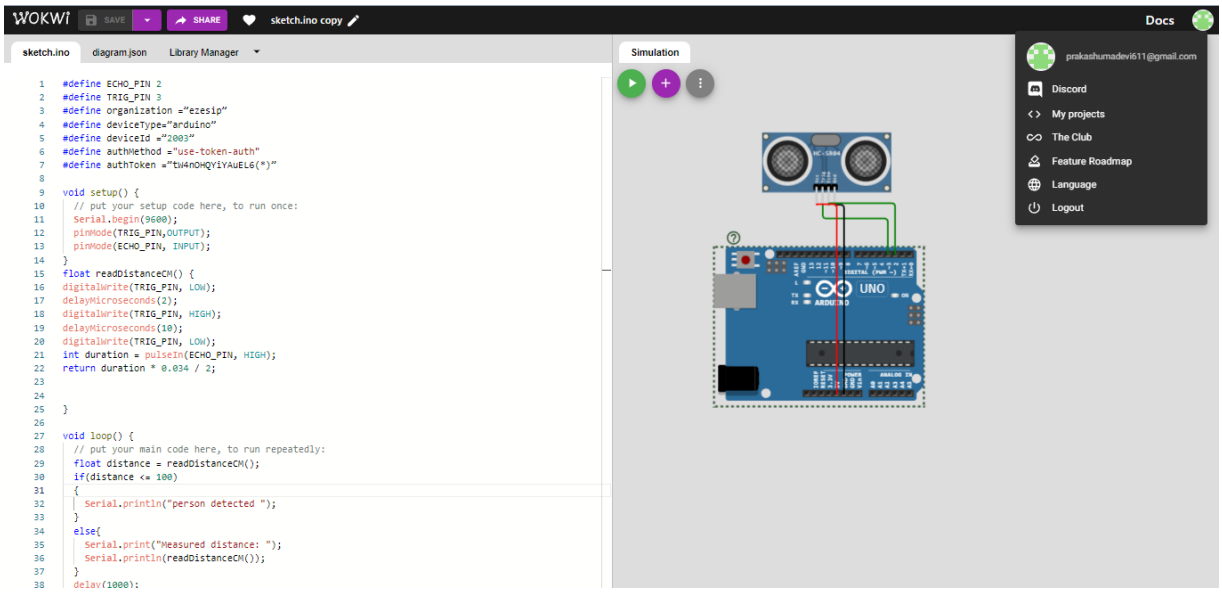
# R.P.Umadevi Assignment -4

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 in device recent events.

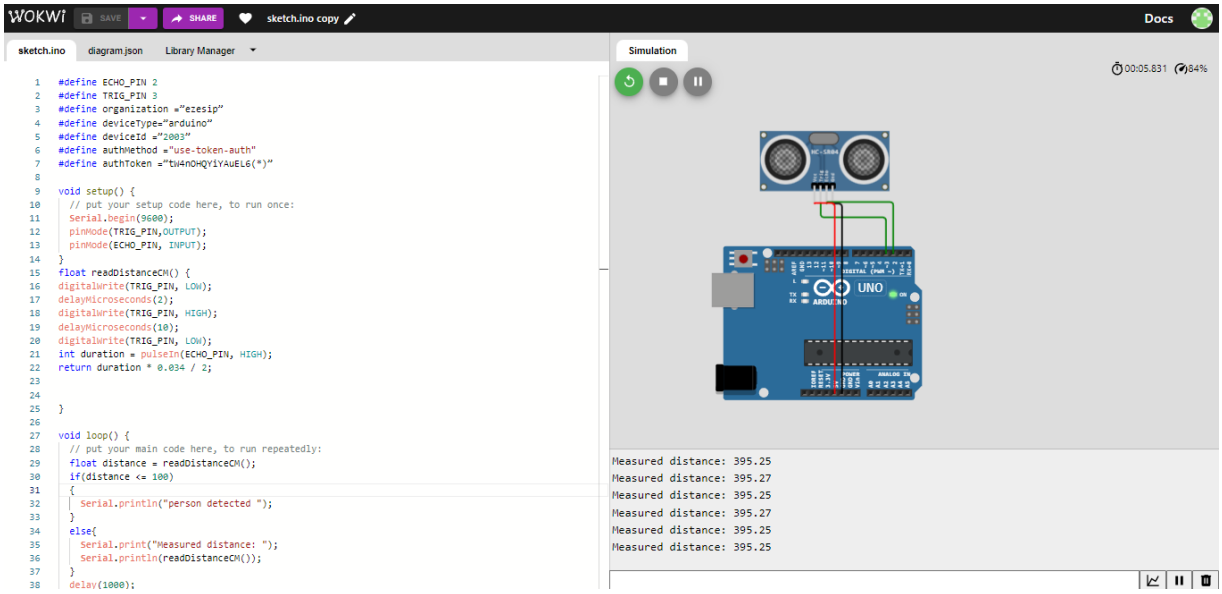
Solution:

```
#define ECHO_PIN 2
#define TRIG_PIN 3
#define organization =”ezeslp”
#define deviceType=” arduino”
#define deviceId =”2003”
#define authMethod ="use-token-auth"
#define authToken =”tW4nOHQYiYAuEL6(*)”

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);



}
```




# Output:




**Wokwi Link:** https://wokwi.com/projects/347742693878661715

# IBM CLOUD

## Device Recent Events