ASSIGNMENT- 4

Assignment Date	22 October 2022
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Maximum Mark	2 Marks

Question:

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.

Program:

```
#define ECHO_PIN 2
#define TRIG_PIN 3

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 ");
 }
```
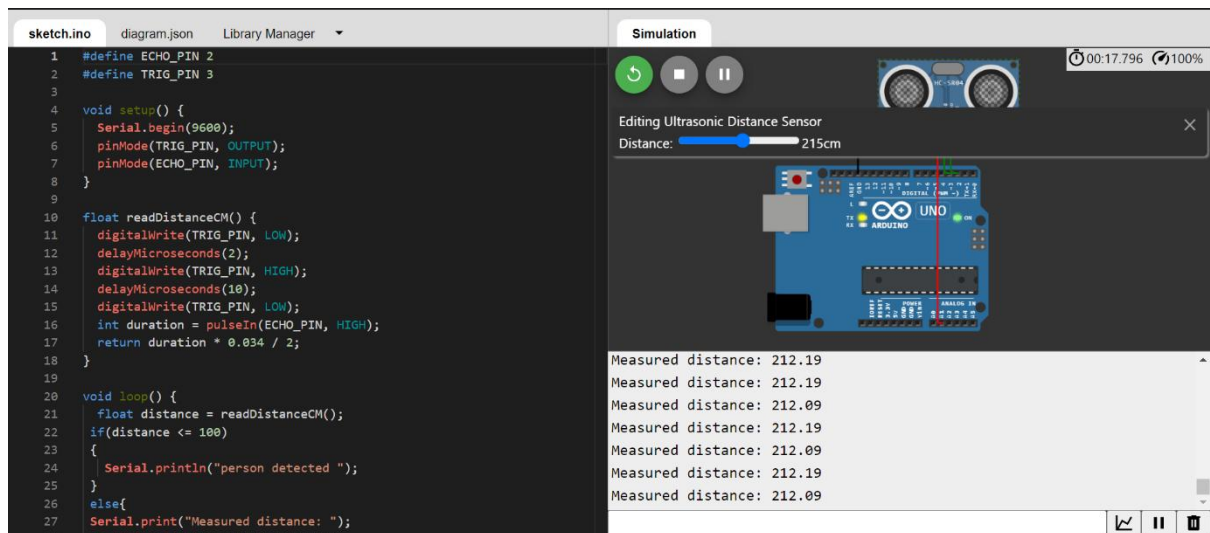
```
else{
Serial.print("Measured distance: ");
 Serial.println(readDistanceCM());
}
 delay(100);
}
```


Wokwi Link: https://wokwi.com/projects/346933024522240596

IBM Cloud