

Assignment -4

Assignment Date	25.10.2022
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Maximum marks	2 marks

Question:-

Write a 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

Note:- I couldn't complete my assignment due to the issues in IBM cloud

program code:-

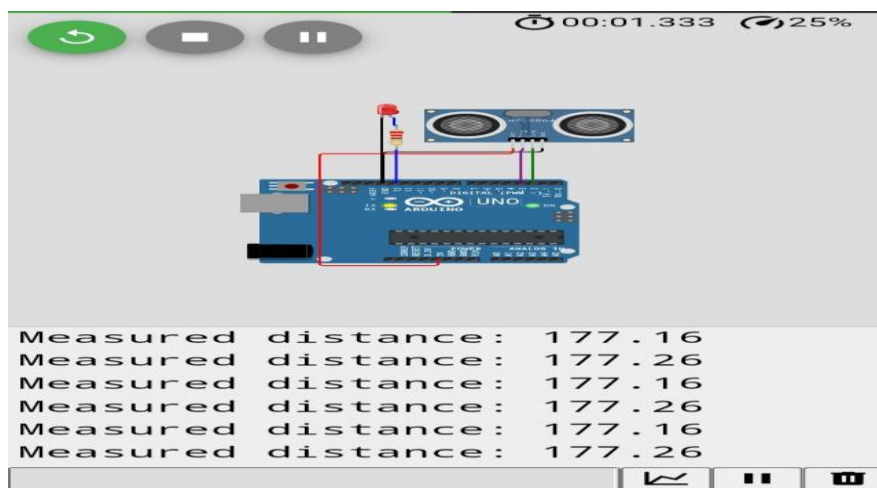
```
#define ECHO_PIN 2
#define TRIG_PIN 3

void setup() {
  Serial.begin(115200);
  pinMode(LED_BUILTIN, OUTPUT);
  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();  
  
  bool isNearby = distance < 100;  
  digitalWrite(LED_BUILTIN, isNearby);  
  
  Serial.print("Measured distance: ");  
  Serial.println(readDistanceCM());  
  
  delay(100);  
}
```

Output :-



Wokwi link: -

<https://wokwi.com/projects/new/arduino-uno>

