

ASSIGNMENT- 4

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Write code and connection in wokwi for ultrasonic sensor. whenever distance is less than 100 cms send alert to ibm cloud and display in device recent events.

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);

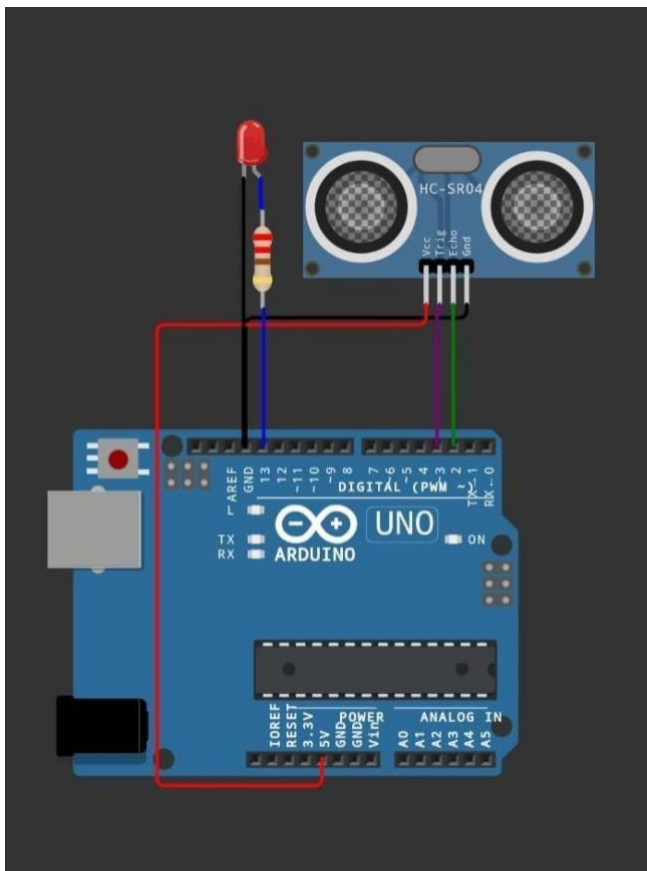
}

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.print1n(readDistanceCM());  
    delay(100);  
}
```

OUTPUT :



Reference: <https://wokwi.com/projects/290056311044833800>