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);
```
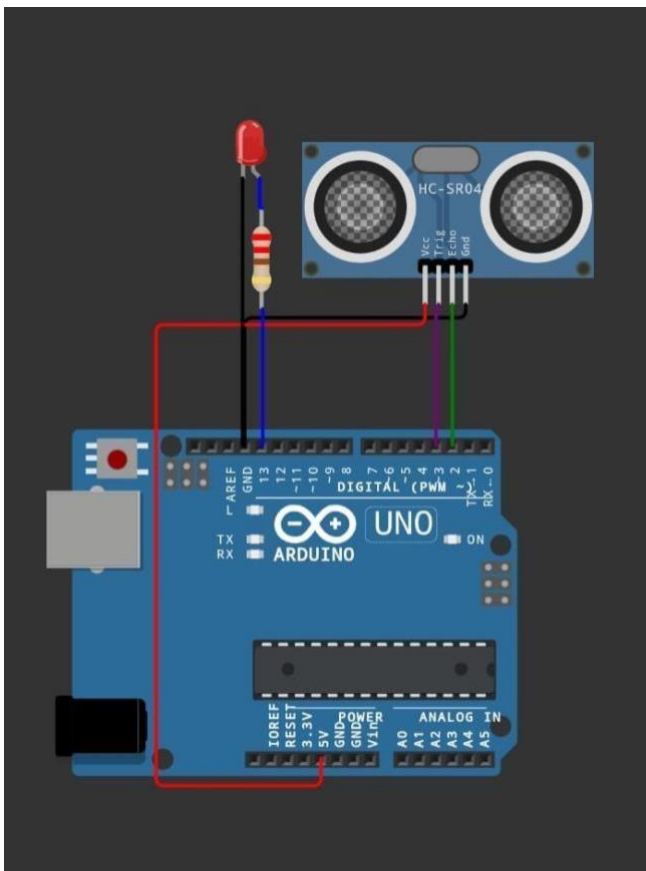
```
pinMode(LED_BUILTIN, OUTPUT);

pinMode(TRIG_PIN, OUTPUT);

pinMode(ECHO_PIN, INPUT);

    }

    Float readDistanceCM() {

digitalWrite(TRIG_PIN, LOW);

delayMicroseconds(2);

degitalWrite(TRIG_PIN, HIGH);

delayMicroseconds(10);

degitalWrite(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