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;

}
```
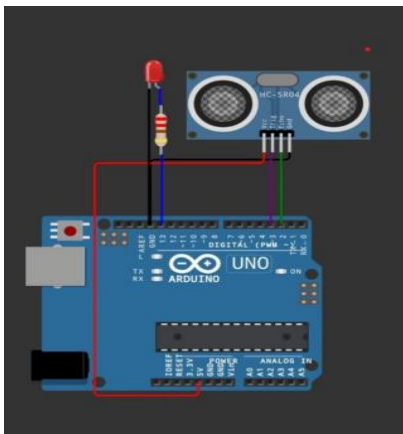
```
void loop() {

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