ASSIGNMENT- 4

TEAM ID	PNT2022TMID52160	
NAME	N.S.Surjith	
ROLL NO	962919104016	

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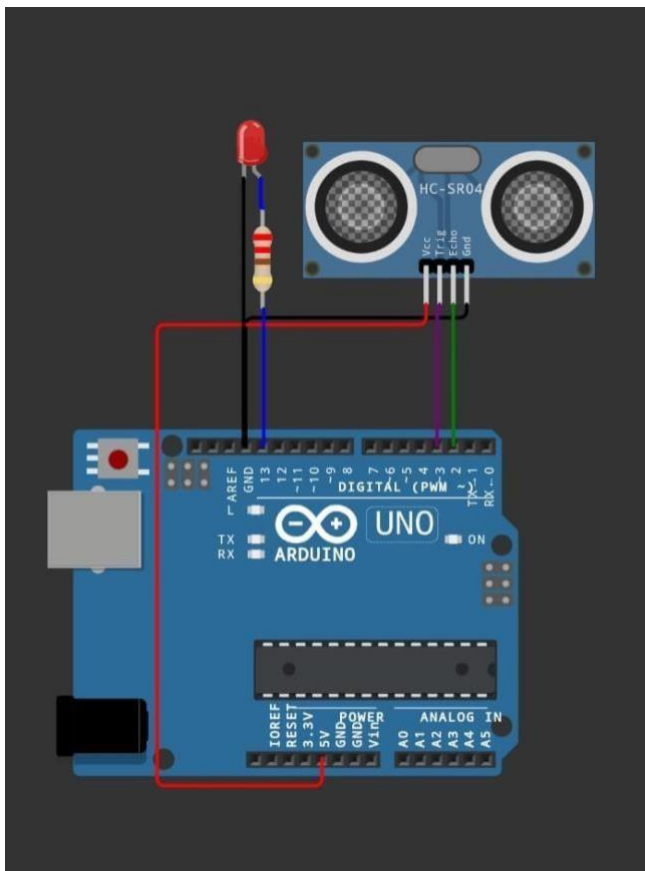
```
pinMode(LED_BUILTIN, OUTPUT);

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