| Assignment Date | 04 November 2022 |
|---|---|
| Student Name | Mr. S. Shamkumar |
| Student Roll Number | 510119106010 |
| Maximum Marks | 2 Marks |

## Question:

Write code and connections in wokwi for the ultrasonic sensor. Whenever the distance is less than 100 cms send an "alert" to the IBM cloud and display in the device recent events
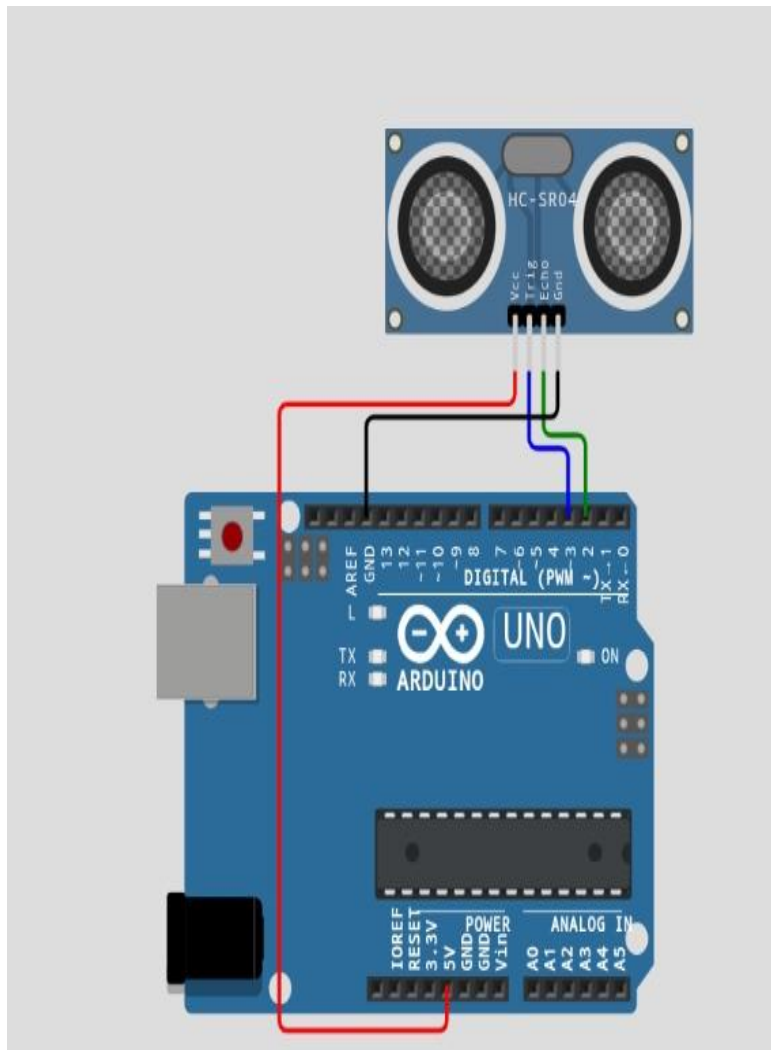
**Code:(C++)**

```cpp
#define PIN_TRIG 3

#define PIN_ECHO 2

void setup() {

  Serial.begin(115200);

  pinMode(PIN_TRIG, OUTPUT);

  pinMode(PIN_ECHO, INPUT);

}

void loop() {

  // Start a new measurement:

  digitalWrite(PIN_TRIG, HIGH);

  delayMicroseconds(10);

  digitalWrite(PIN_TRIG, LOW);

  // Read the result:

  int duration = pulseIn(PIN_ECHO, HIGH);

  Serial.print("Distance in CM: ");

  Serial.println(duration / 58);

  Serial.print("Distance in inches: ");

  Serial.println(duration / 148);

delay(1000);

}
```

**Circuit Diagram:**



Wokwi link:
https://wokwi.com/projects/347374704968860244