ASSIGNMENT - 4

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.

```
#define PIN_TRIG 11
#define PIN_ECHO 8

void setup() { Serial.begin(115200); pinMode(PIN_TRIG, OUTPUT);
pinMode(PIN_ECHO, INPUT);
}

void loop() { digitalWrite(PIN_TRIG, HIGH); delayMicroseconds(10);
digitalWrite(PIN_TRIG, LOW);
int d = (pulseIn(PIN_ECHO, HIGH))/58; Serial.print("Distance in CM: ");
Serial.println(d);
if(d < 100){
Serial.println("alert ! ! ! !");
}
delay(1000);
}
```

Simulation

Distance in CM: 50
alert!!!!
Distance in CM: 50
alert!!!!
Distance in CM: 50
alert!!!!

Identity   Device Information   Recent Events   State   Logs

The recent events listed show the live stream of data that is coming and going from this device.

Event	Value	Format	Last Received
event_1hp	{"distance":30}	json	a few seconds ago
event_1hp	{"distance":28}	json	a few seconds ago
event_1hp	{"distance":48}	json	a few seconds ago
event_1hp	{"distance":76}	json	a few seconds ago
event_1hp	{"distance":59}	json	a few seconds ago