

ASSIGNMENT-4

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AssignmentDate	26October2022
TeamID	PNT2022TMID15087
ProjectName	GasLeakagemonitoring&AlertingsystemforIndustries
MaximumMarks	2Marks

Write code and connect ons in wokwi for u trasonic. Whenever d stanceisless than 100 cms send “alert” to ibm cloud and display in devicerecentevents.

Soluton:

```
#define ECHO_PIN 2

#define TRIG_PIN 3

#define organization="mmbh4c" #define deviceType

="Ultrasonic" #define deviceId="1112" #define authMethod="use-token-auth" #define authToken="123456789"

void setup()

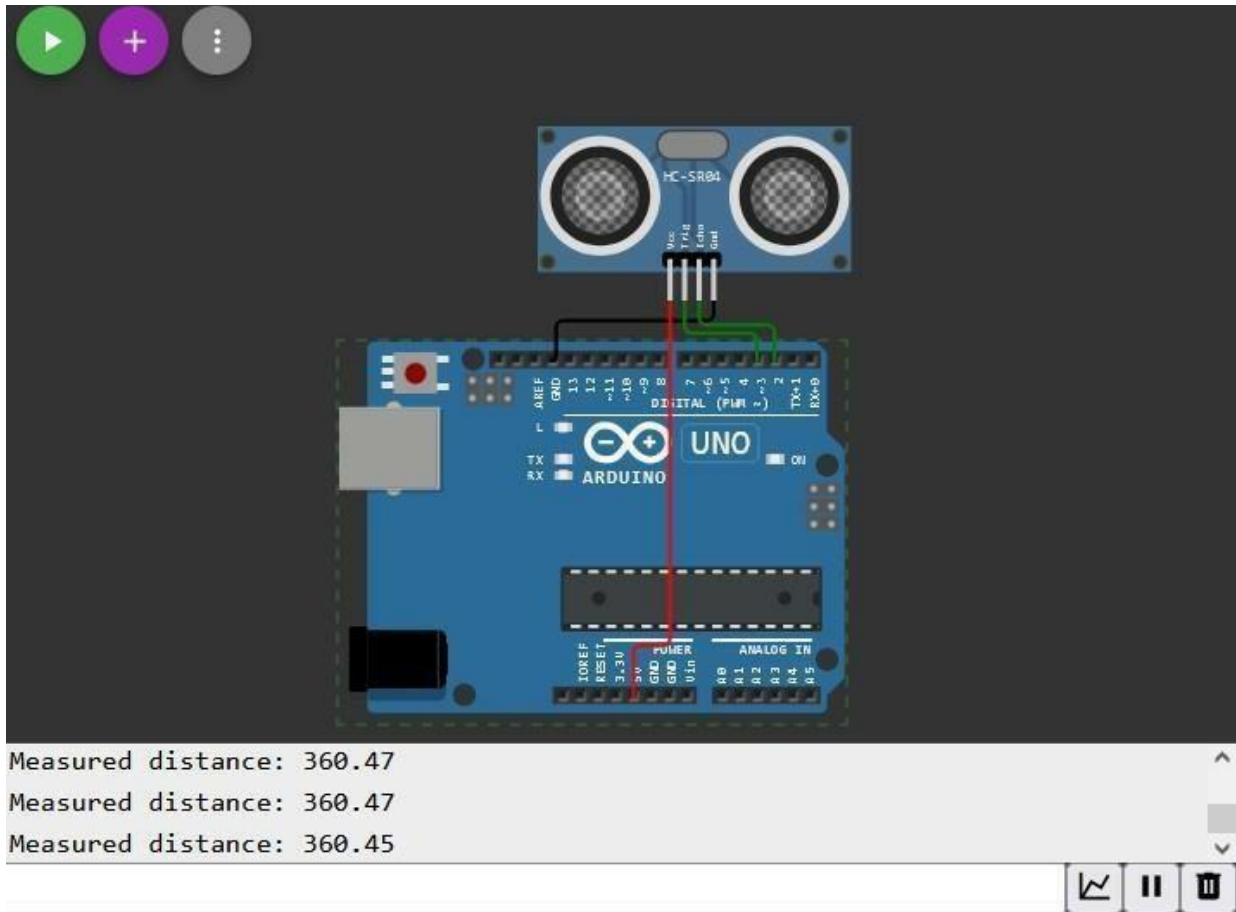
{ Serial.begin(9600); pinMode(TRIG_PIN, OUTPUT); pinMode(ECHO_PIN, INPUT);

};

}
```

```
    delayMicroseconds(2);digitalWrite(TRIG_PIN,  
    N,  
    HIGH);delayMicroseconds(10);digitalWrite(  
    TRIG_PIN,LOW);  
    intduration=pulseIn(ECHO_PIN,HIGH);  
    returnduration*0034/2;  
}
```

```
voidloop(){  
    float distance  
=readDistanceCM();if(distance<=100)  
{  
    Serial.println("persondetected");  
}  
else{ Serial.print("Measureddistance:");  
Serial.println(readDistanceCM());  
}  
    delay(100);
```



IBMCloud

Devicerecentevents

10/26/2022

Browse Action Device Types Interfaces Add Device

▼ Ultrasonic_1 Connected Ultrasonic Device Oct 26, 2022 7:54 PM → ...

Identity Device Information **Recent Events** State Logs X

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

Event	Value	Format	Last Received
event_1	{"status": "Person Detected"}	json	a few seconds ago
event_1	{"status": "Person Detected"}	json	a few seconds ago
event_1	{"status": "Person Detected"}	json	a few seconds ago
event_1	{"status": "Person Detected"}	json	a few seconds ago

1 Simulation running