Wokwi link:

https://wokwi.com/projects/290056311044833800

CODE FOR THE FUNCTION:

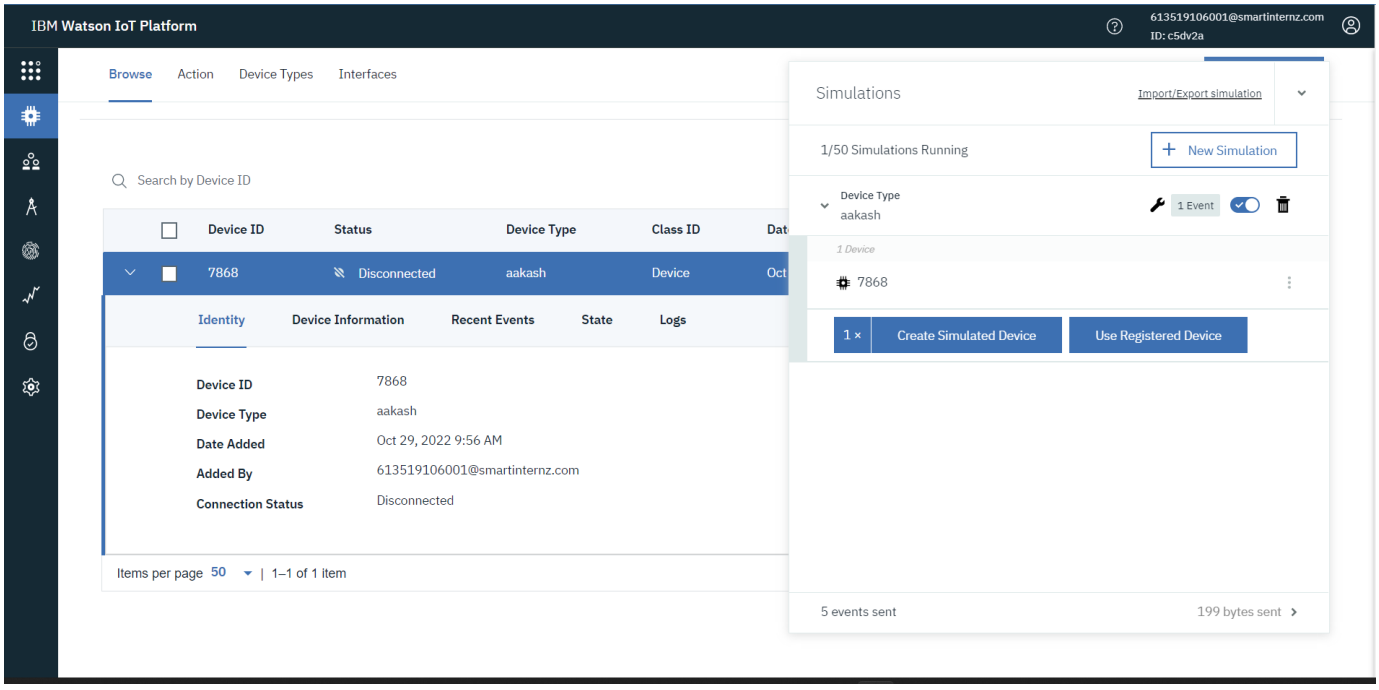
```
#define ECHO_PIN 2
#define TRIG_PIN 3
#define organization = "pb6xw8"
#define deviceType = "abcd"
#define deviceId = "12"
#define authMethod = "token"
#define authToken = "12345678"

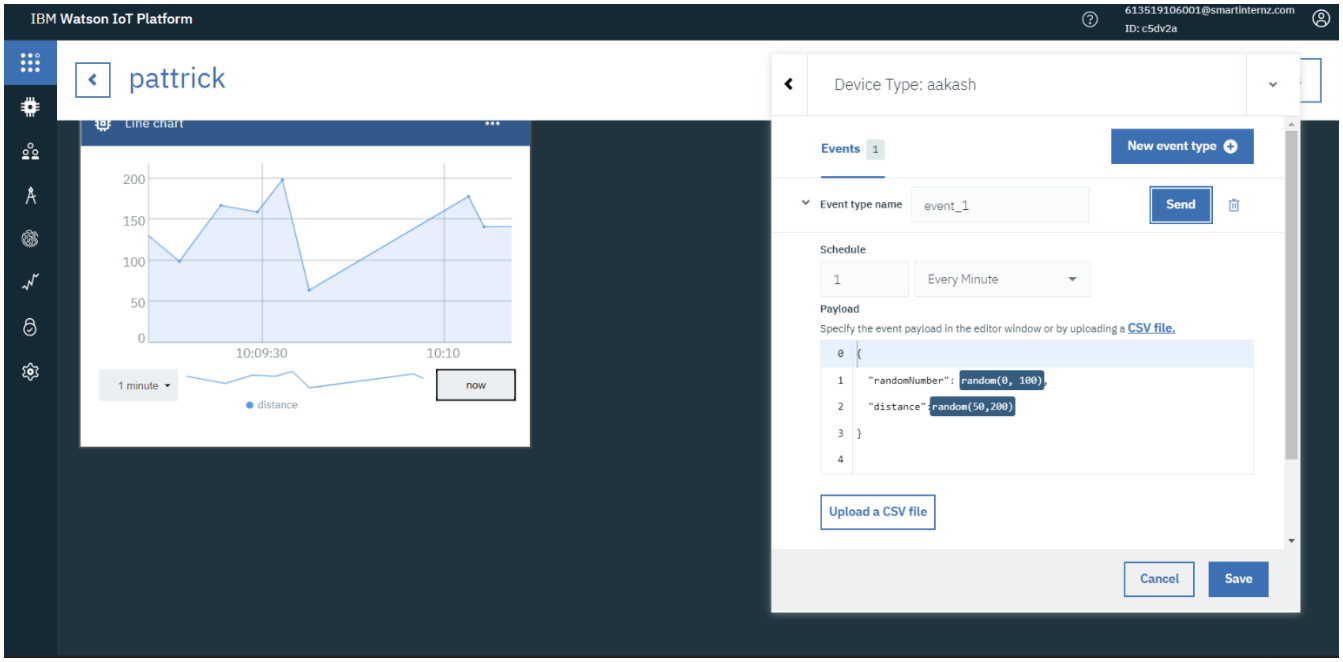
void setup(){
   Serial.begin(9600);
   pinMode(TRIG_PIN,OUTPUT);
   pinMode(ECHO_PIN,INPUT);
}

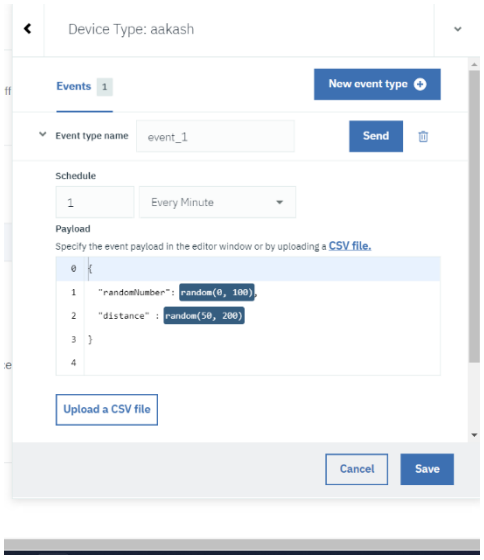
 float readDistanceCM(){
    digitalWrite(TRIG_PIN,LOW);
    delayMicroseconds(2);
    digitalWrite(TRIG_PIN,HIGH);
    delayMicroseconds(10);
    digitalWrite(TRIG_PIN,LOW);
    int duration=pulseIn(ECHO_PIN,HIGH);
    return duration*0.034/2;
 }
 void loop(){
    float distance=readDistanceCM();
```

```
    if(distance<=100)
    {
       Serial.println("person detected");
    }
    else{
       Serial.print("Measured distance:");
       Serial.println(readDistanceCM());
    }
    delay(1000
);
}
```

CLOUD:




IBM Watson IoT Platform
613519106001@smartinternz.com
ID: c5dv2a
pattrick
Line chart
200
150
100
50
0
10:09:30
10:10
1 minute
now
distance
Device Type: aakash
Events 1
New event type
Event type name
event_1
Send
Schedule
1
Every Minute
Payload
Specify the event payload in the editor window or by uploading a CSV file.
{
"randomNumber": random(0, 100),
"distance" :random(50,200)
}
Upload a CSV file
Cancel
Save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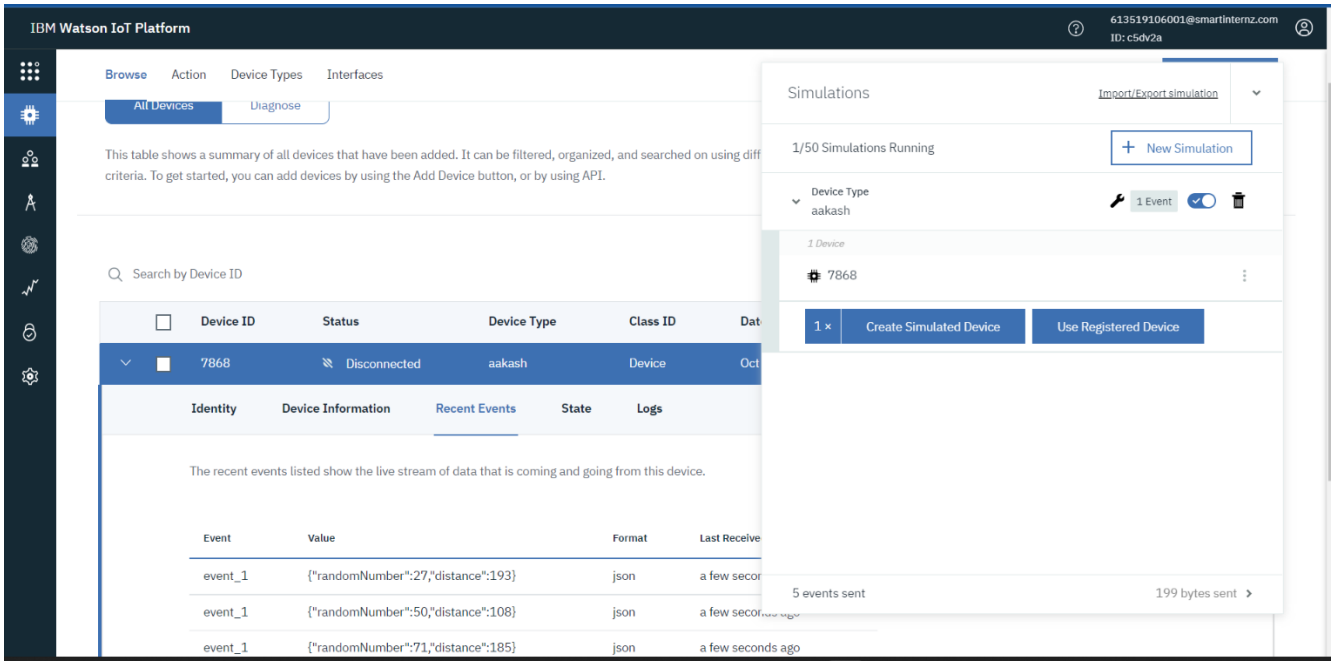
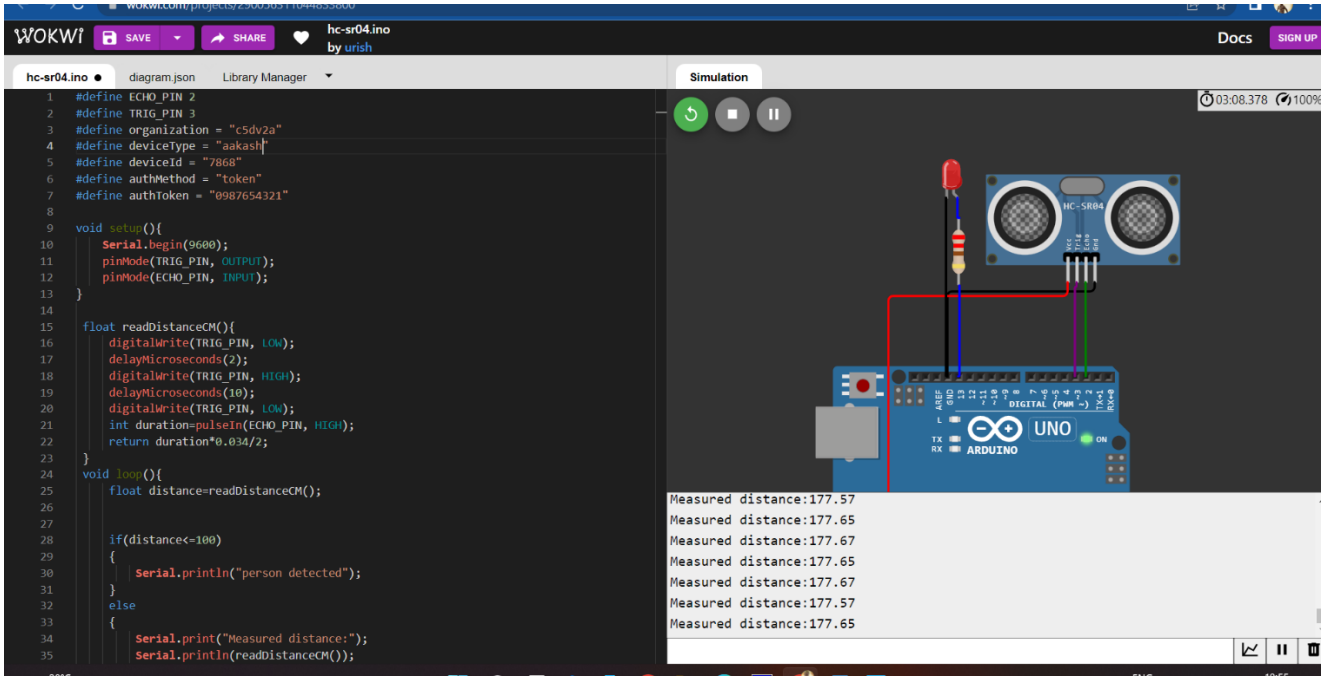
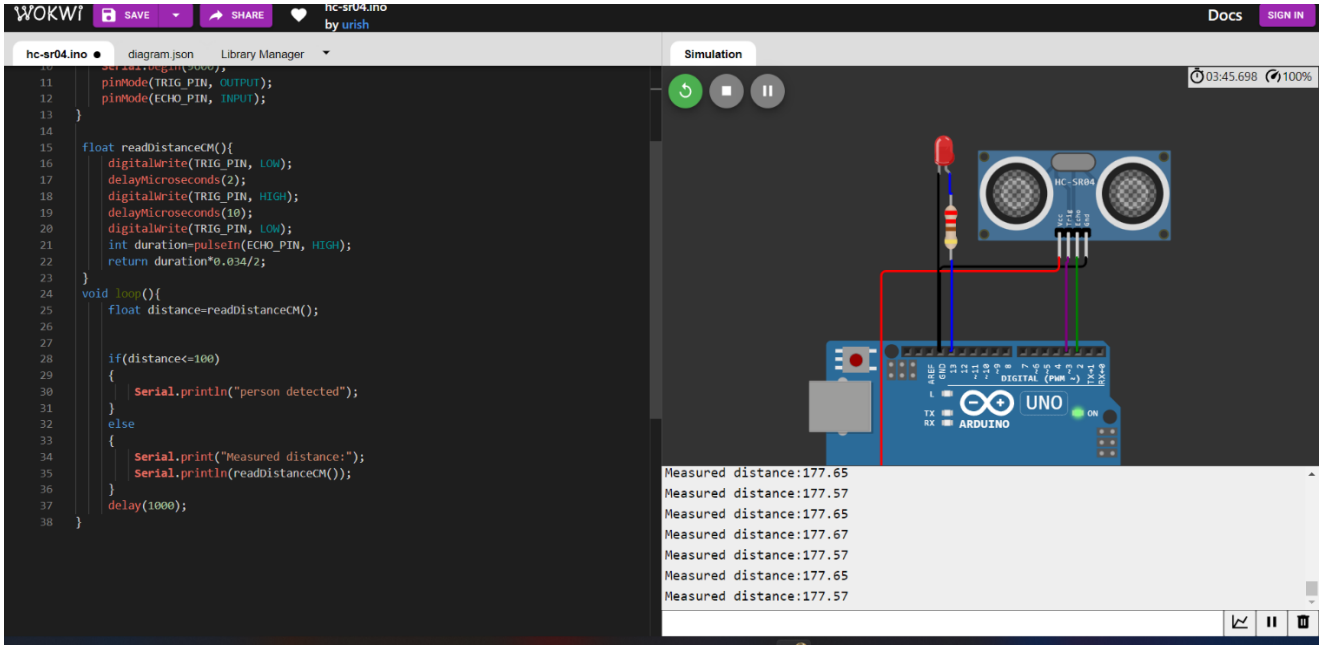

IBM Watson IoT Platform
613519106001@smartinternz.com
ID: c5dv2a
Browse
Action
Device Types
Interfaces
All Devices
Diagnose
This table shows a summary of all devices that have been added. It can be filtered, organized, and searched on using diff
criteria. To get started, you can add devices by using the Add Device button, or by using API.
Search by Device ID
Device ID
Status
Device Type
Class ID
7868
Disconnected
aakash
Device
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
event_1
{"randomNumber":27,"distance":193}
json
event_1
{"randomNumber":50,"distance":108}
json
event_1
{"randomNumber":71,"distance":185}
json
a few seconds ago
Simulations
Import/Export simulation
1/50 Simulations Running
New Simulation
Device Type
aakash
1 Event
1 Device
7868
1 ×
Create Simulated Device
Use Registered Device
5 events sent
199 bytes sent


WOKWI
SAVE
SHARE
hc-sr04.ino
by urish
Docs
SIGN UP
hc-sr04.ino
diagram.json
Library Manager
#define ECHO_PIN 2
#define TRIG_PIN 3
#define organization "c5dv2a"
#define deviceType "aakash"
#define deviceId "7868"
#define authMethod "token"
#define authToken "0987654321"
void setup(){
Serial.begin(9600);
pinMode(TRIG_PIN, OUTPUT);
pinMode(ECHO_PIN, INPUT);
}
float readDistanceCM(){
digitalWrite(TRIG_PIN, LOW);
delayMicroseconds(2);
digitalWrite(TRIG_PIN, HIGH);
delayMicroseconds(10);
digitalWrite(TRIG_PIN, LOW);
int duration=pulseIn(ECHO_PIN, HIGH);
return duration*0.034/2;
}
void loop(){
float distance=readDistanceCM();
if(distance<=100)
{
Serial.println("person detected");
}
else
{
Serial.print("Measured distance:");
Serial.println(readDistanceCM());
Simulation
03:08.378
100%
HC-SR04
UNO
ARDUINO
Measured distance:177.57
Measured distance:177.65
Measured distance:177.67
Measured distance:177.65
Measured distance:177.67
Measured distance:177.57
Measured distance:177.65




```
    pinMode(TRIG_PIN, OUTPUT);
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