ASSIGNMENT 4

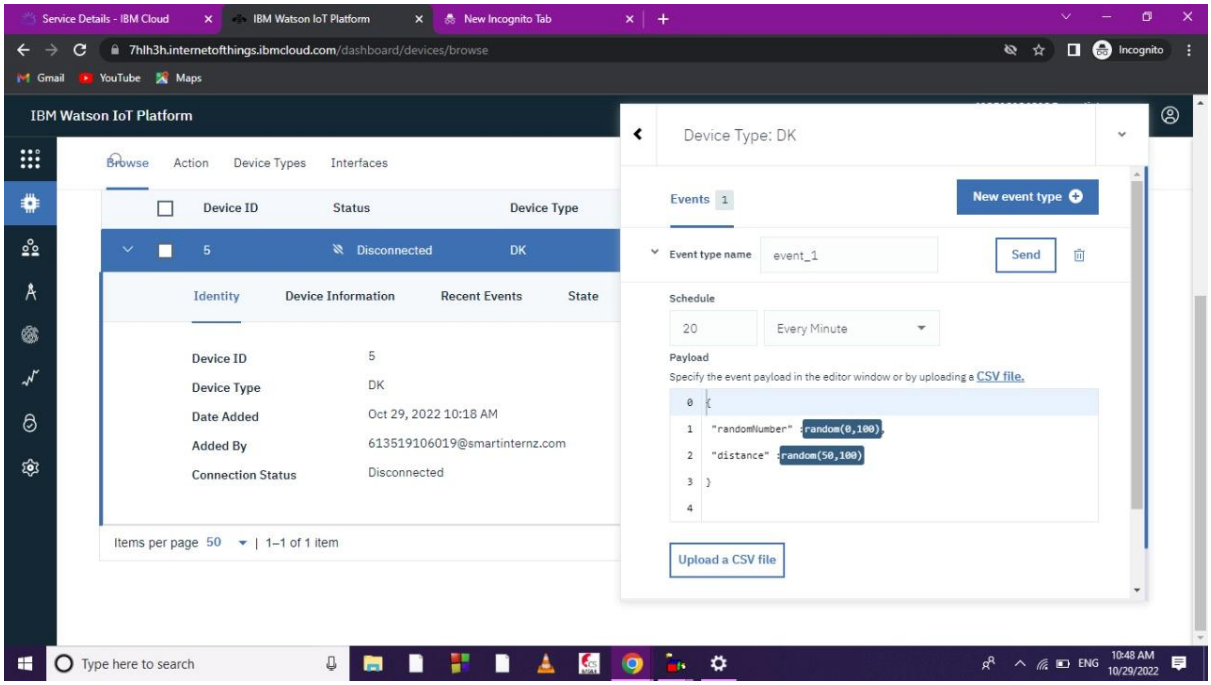
Wowki link : https://wokwi.com/projects/290056311044833800

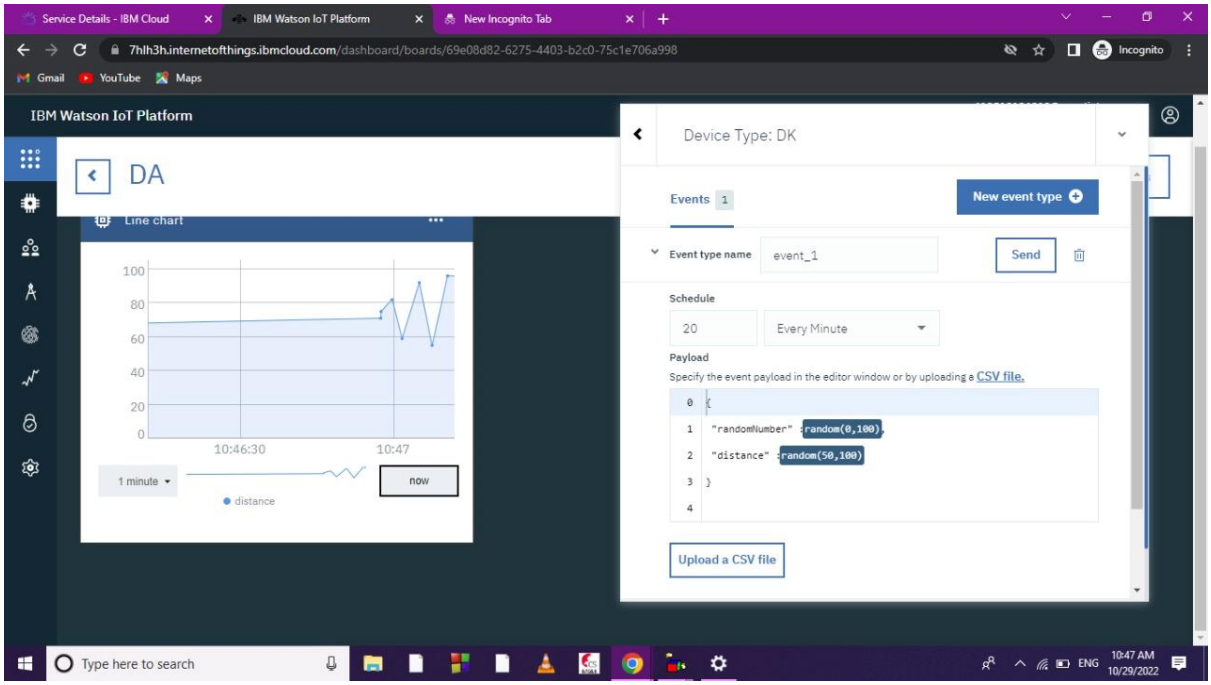
Program code:

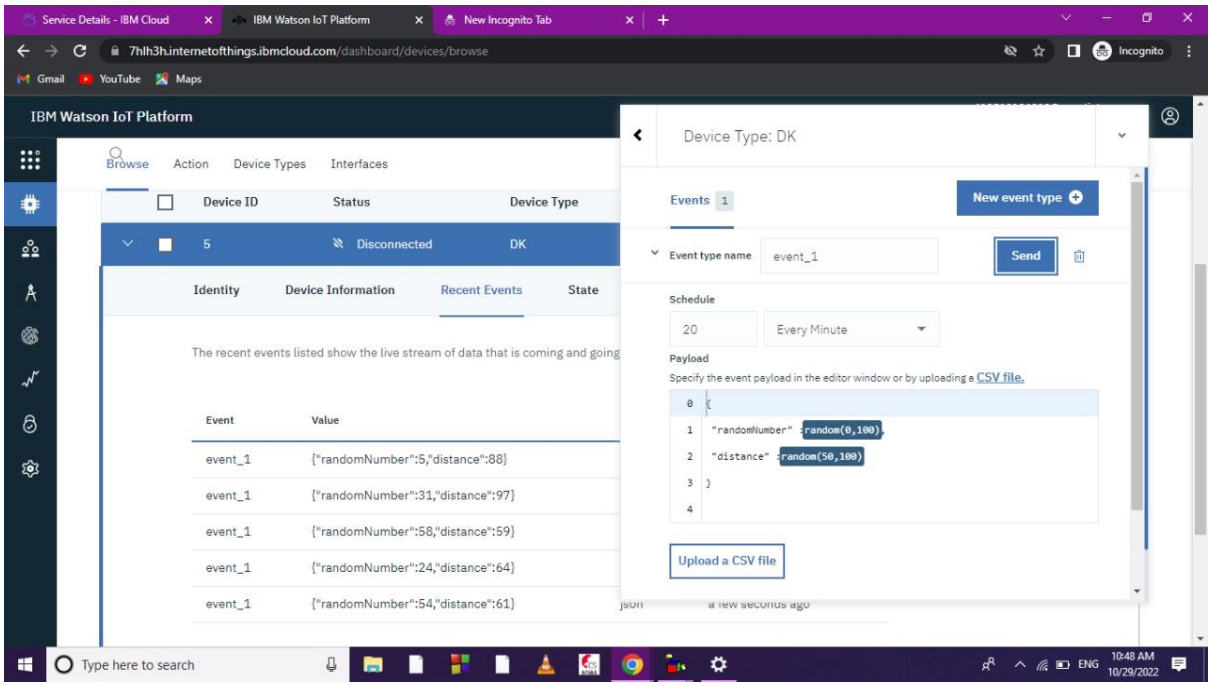
```
#define ECHO_PIN2
#define TRIG_PIN3
#define organization = "7hlh3h"
#define deviceType = "DK"
#define deviceId = "5"
#define authMethod = "token"
#define authToken = "9876543210"

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;
 }
```

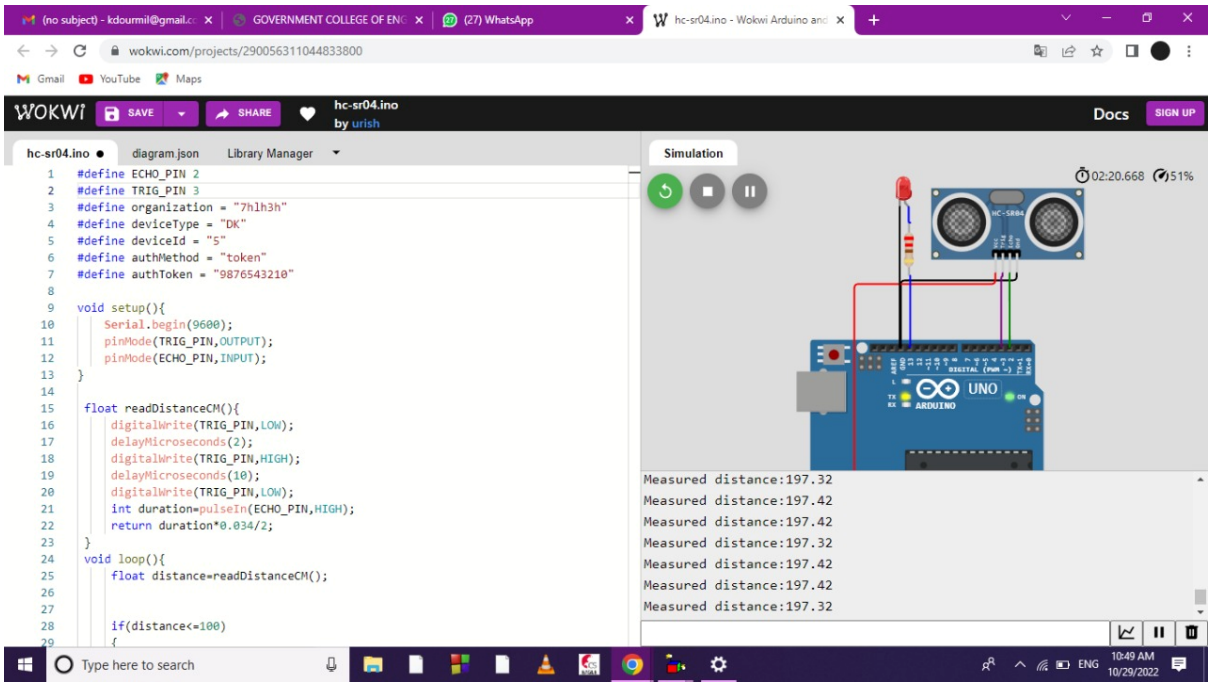
```
void loop(){
   float distance=readDistanceCM();



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

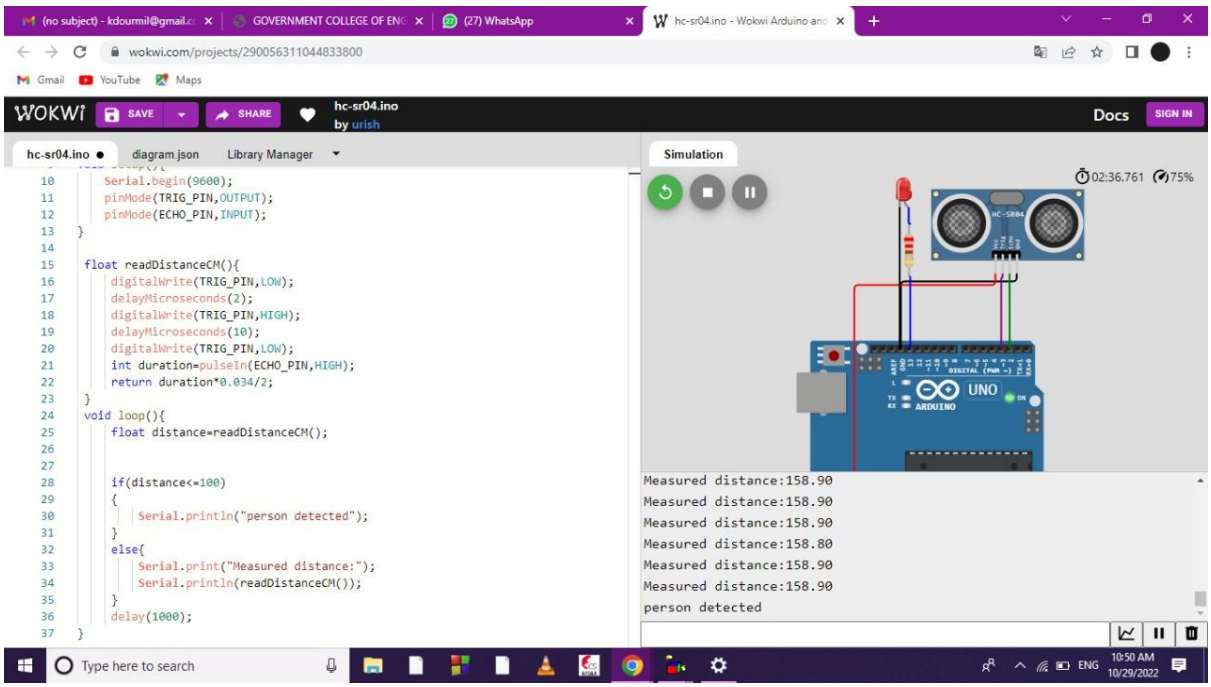
IBM CLOUD


Service Details - IBM Cloud
IBM Watson IoT Platform
New Incognito Tab
7hlh3h.internetofthings.ibmcloud.com/dashboard/devices/browse
Incognito
Gmail
YouTube
Maps
IBM Watson IoT Platform
Browse
Action
Device Types
Interfaces
Device ID
Status
Device Type
5
Disconnected
DK
Identity
Device Information
Recent Events
State
Device ID
5
Device Type
DK
Date Added
Oct 29, 2022 10:18 AM
Added By
613519106019@smartinternz.com
Connection Status
Disconnected
Items per page 50
1–1 of 1 item
Device Type: DK
Events 1
New event type
Event type name
event_1
Send
Schedule
20
Every Minute
Payload
Specify the event payload in the editor window or by uploading a CSV file.
{
"randomNumber" :random(0,100),
"distance" :random(50,100)
}
Upload a CSV file
Type here to search
ENG
10:48 AM
10/29/2022


Service Details - IBM Cloud
IBM Watson IoT Platform
New Incognito Tab
7hlh3h.internetofthings.ibmcloud.com/dashboard/boards/69e08d82-6275-4403-b2c0-75c1e706a998
Incognito
Gmail
YouTube
Maps
IBM Watson IoT Platform
DA
Line chart
100
80
60
40
20
0
10:46:30
10:47
1 minute
now
distance
Device Type: DK
Events 1
New event type
Event type name
event_1
Send
Schedule
20
Every Minute
Payload
Specify the event payload in the editor window or by uploading a CSV file.
{
"randomNumber" :random(0,100),
"distance" :random(50,100)
}
Upload a CSV file
Type here to search
ENG
10:47 AM
10/29/2022


Service Details - IBM Cloud
IBM Watson IoT Platform
New Incognito Tab
7hlh3h.internetofthings.ibmcloud.com/dashboard/devices/browse
Incognito
Gmail
YouTube
Maps
IBM Watson IoT Platform
Browse
Action
Device Types
Interfaces
Device ID
Status
Device Type
5
Disconnected
DK
Identity
Device Information
Recent Events
State
The recent events listed show the live stream of data that is coming and going
Event
Value
event_1
{"randomNumber":5,"distance":88}
event_1
{"randomNumber":31,"distance":97}
event_1
{"randomNumber":58,"distance":59}
event_1
{"randomNumber":24,"distance":64}
event_1
{"randomNumber":54,"distance":61}
Device Type: DK
Events 1
New event type
Event type name
event_1
Send
Schedule
20
Every Minute
Payload
Specify the event payload in the editor window or by uploading a CSV file.
{
"randomNumber" :random(0,100),
"distance" :random(50,100)
}
Upload a CSV file
Type here to search
ENG
10:48 AM
10/29/2022


wokwi.com/projects/290056311044833800
WOKWI
SAVE
SHARE
hc-sr04.ino
by urish
Docs
SIGN UP
hc-sr04.ino
diagram.json
Library Manager
Simulation
02:20.668
51%
#define ECHO_PIN 2
#define TRIG_PIN 3
#define organization "7hlh3h"
#define deviceType "DK"
#define deviceId "5"
#define authMethod "token"
#define authToken "9876543210"
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)
Measured distance:197.32
Measured distance:197.42
Measured distance:197.42
Measured distance:197.32
Measured distance:197.42
Measured distance:197.42
Measured distance:197.32
Type here to search
ENG
10:49 AM
10/29/2022


wokwi.com/projects/290056311044833800
WOKWI
SAVE
SHARE
hc-sr04.ino
by urish
Docs
SIGN IN
hc-sr04.ino
diagram.json
Library Manager
Simulation
02:36.761
75%
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);
}
Measured distance:158.90
Measured distance:158.90
Measured distance:158.90
Measured distance:158.80
Measured distance:158.90
Measured distance:158.90
person detected
Type here to search
ENG
10:50 AM
10/29/2022