

ASSIGNMENT- 4

1) CODE:

```
#define ECHO_PIN 2
#define TRIG_PIN 3
#define organization = "63txw2"
#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);
}
```

2) LINK:

<https://wokwi.com/projects/347009163933516372>

3) IBM CLOUD:

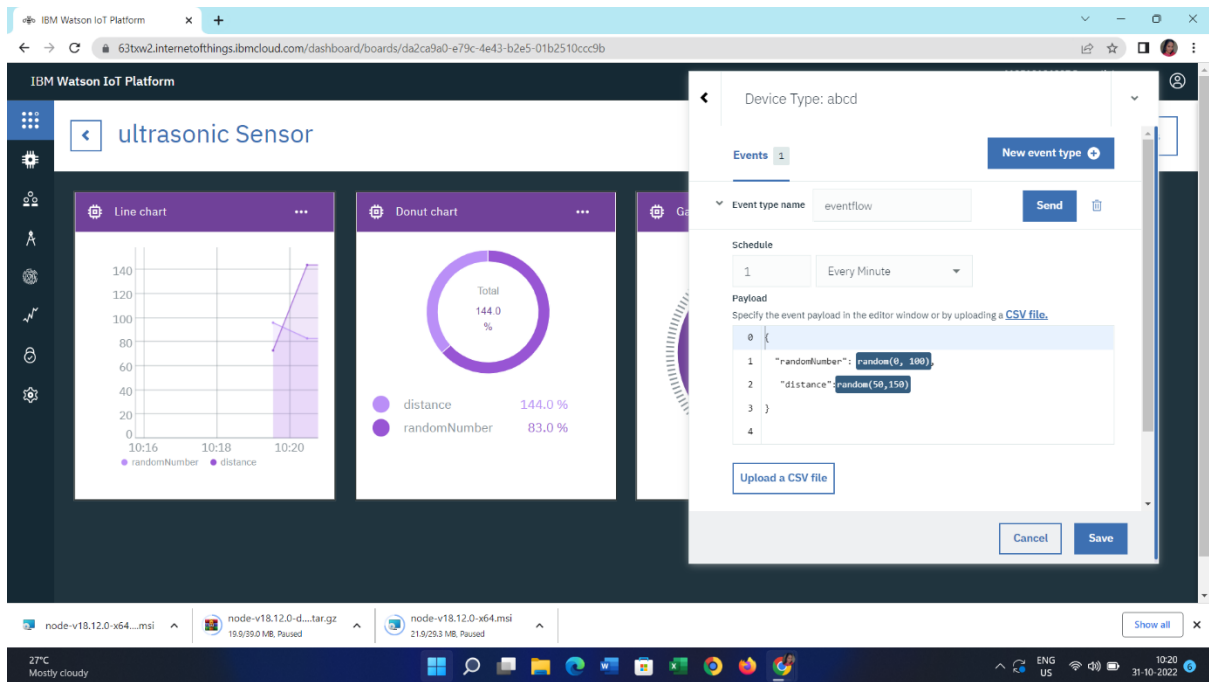
The screenshot shows the IBM Watson IoT Platform dashboard. The top navigation bar includes 'Browse', 'Action', 'Device Types', and 'Interfaces'. A search bar is present with the text 'Search by Device ID'. The main content area displays a table with columns: Device ID, Status, Device Type, Class ID, Date Added, and Descriptive Location. A single device is listed with ID 12, Status 'Disconnected', Device Type 'abcd', Class ID 'Device', and Date Added 'Oct 29, 2022 12:29 PM'. Below the table, a modal window titled 'Identity' is open, showing details for the selected device: Device ID 12, Device Type abcd, Date Added Oct 29, 2022 12:29 PM, Added By 613519106007@smartinternz.com, and Connection Status Disconnected. The bottom status bar indicates '1 Simulation running'.

Device ID	Status	Device Type	Class ID	Date Added	Descriptive Location
12	Disconnected	abcd	Device	Oct 29, 2022 12:29 PM	

Device ID	Device Type	Date Added	Added By	Connection Status
12	abcd	Oct 29, 2022 12:29 PM	613519106007@smartinternz.com	Disconnected

The screenshot shows the IBM Watson IoT Platform dashboard with the 'Recent Events' tab selected for device ID 12. The main content area displays a table with columns: Event, Value, Format, and Last Received. The table lists four events, all of type 'eventflow', with values containing random numbers and distances. The bottom status bar indicates '1 Simulation running'.

Event	Value	Format	Last Received
eventflow	{"randomNumber":24,"distance":145}	json	a few seconds ago
eventflow	{"randomNumber":43,"distance":103}	json	a few seconds ago
eventflow	{"randomNumber":1,"distance":51}	json	a few seconds ago
eventflow	{"randomNumber":11,"distance":53}	json	a few seconds ago



4) WOKKI:

