Assignment 4

WOKWI PROGRAM

Assignment Date	**23OCT2322**
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Sal den: Roll **Number**	1902258
Maximum **Marks**	**2 Marks**

Team ID PNT2022TMID06075

PROGRAM

Smart Waste Management System for Metropolitan Cities
ASSIGNMENT 4:
Write code and connections in vvokwi for ultrasonic sensors.
Whenever distance is less than 100 cars send "alert" to ibm cloud and display in device recent events.
Upload document with vvokwi share link and images of ibm cloud

```
CBE.
#include <WiFi.h>
#include <PubSubClient,h>
WiFiClient wifiClient;
String data3;
#define ORG "4yi0vc"
#define DEVICE_TYPE "nodellcu"
#define DEVICE_ID "Assignment4"
#define TOKEN "123456789"
#define speed 0.034
#define led 14
char server[] = ORG ".messaging.internetofthings.ibrncloud.cornn;
char publishTopic[] — "iot-2/evt/Data/fmtijson";
char topic[] = "iot-2/cmd/homeifmt/String";
char authMethod[]      "use-token-auth";
char token[] = TOKEN;
char clientIdD      "d:" ORG ":" DEVICE_TYPE ":'' DEVICE_ID;
PubSubClient client(server, 1883, wifiClient);
void publishData();
const int trigpin=5;
const int echopin=18;
String command;
String data-";
long duration;
float dist;
void setup()
(
  Serial.begin(115200);
  pinMode(led, OUTPUT);
  pinMode(trigpin, OUTPUT);
  pinMode(echopin, INPUT);
  wifiConnect(); Co
  rnqttnnect();
)
 void loop() {
  boom isNearby = dist < 100;
  digitalWrite(led, isNearby);

  publish Data();
  delay(500);

  if (lclient.loop())
    mcittConnect();
  )
)
void wifiConnect() {
  Serial.print("Connecting to "); Serial.print("Wifi");
  WiFi.begin("Wokvvi-GUEST",         6);
  while (WiFi.status()         WL_CONNECTED) {
    delay(500);
    Serial.print(".");
  )
```