#define BLYNK\_PRINT SwSerial

#include <SoftwareSerial.h>

SoftwareSerial SwSerial(2, 3); // RX, TX

#include <BlynkSimpleStream.h>

const int trigPin = 7;

const int echoPin = 6;

const int trigPin1 = 5;

const int echoPin1 = 4;

const int led = 3;

int t=0;

const int led1 = 2;

char auth[] = "906d49fcc4634364b7368a437fca76de";

void setup()

{

Serial.begin(9600);

pinMode(trigPin, OUTPUT);

pinMode(echoPin, INPUT);

pinMode(trigPin1, OUTPUT);

pinMode(echoPin1, INPUT);

pinMode(led, OUTPUT);

Blynk.begin(Serial, auth);

}

long duration, r;

float distance;

long duration1, p;

float distance1;

void loop()

{

Blynk.run(); ///iot

//////////////////////////////////////////////////////////

digitalWrite(trigPin, LOW);

delayMicroseconds(2);

digitalWrite(trigPin, HIGH);

delayMicroseconds(10); /////ultr 1

digitalWrite(trigPin, LOW);

duration = pulseIn(echoPin, HIGH);

long r = 3.4 \* duration / 2;

float distance = r / 100.00;

///////////////////////////////////////////////////////////

digitalWrite(trigPin1, LOW);

delayMicroseconds(2);

digitalWrite(trigPin1, HIGH);

delayMicroseconds(10); /////ultr 2

digitalWrite(trigPin1, LOW);

duration1 = pulseIn(echoPin1, HIGH);

long p = 3.4 \* duration1 / 2;

float distance1 = p / 100.00;

/////////////////////////////////////////////////////////////

if(distance>=7 && t==0)

{

digitalWrite(led,LOW);

t=1;

}

if(distance<7 && t==1)

{

digitalWrite(led,HIGH);

t=0;

}

if(distance1>=7)

{

Blynk.virtualWrite(0,"Dustbin Empty");

}

else

{

Blynk.virtualWrite(0,"Dustbin Full");

}

int l = digitalRead (9) ; ////////////////////IR 1

if (l== HIGH)

{

Blynk.virtualWrite(1,"Dustbin in KSRCT");

}

else

{

Blynk.virtualWrite(1," ");

}

int K = digitalRead (10) ; /////////////////IR2

if (K== HIGH)

{

Blynk.virtualWrite(2,"Dustbin in IIT");

}

else

{

Blynk.virtualWrite(2," ");

}

}