Program

//IOT BASED HEALTH MONITORING

#include<SoftwareSerial.h>

SoftwareSerial esp(3,2);//rx,tx

int temp = A0; //temperature sensor

 int inhael = A1; //mq sensor

 int wet = A2; //2 pin

int sensorValue0;

int outputValue0;

int sensorValue1;

int outputValue1;

int sensorValue2;

int outputValue2;

int buttonState = 0;

const int pir= 4;

int buzzer=5;

int signal1=6;

int signal2=7;

int fan=1;

int humidity;

#include <LiquidCrystal.h>

// initialize the library by associating any needed LCD interface pin

// with the arduino pin number it is connected to

const int rs = 13, en = 12, d4 = 11, d5 = 10, d6 = 9, d7 = 8;

LiquidCrystal lcd(rs, en, d4, d5, d6, d7);

// initialize the library by associating any needed LCD interface pin

// with the arduino pin number it is connected to

void setup()

{

   pinMode(pir,INPUT);

  pinMode(buzzer,OUTPUT);

  pinMode(signal1,OUTPUT);

  pinMode(signal2,OUTPUT);

   pinMode(fan,OUTPUT);

   pinMode(buzzer,OUTPUT);

  //pinMode(sensorValue0,INPUT);

 // pinMode(sensorValue1,INPUT);

  //pinMode(sensorValue2,INPUT);

 lcd.begin(16, 2);

  // Print a message to the LCD.

  lcd.print("HEALTH MONITORING");

    delay(1000);

    lcd.setCursor(0, 1);

  // Print a message to the LCD.

  lcd.print("   IOT BASED      ");

  // put your setup code here, to run once:

  Serial.begin(115200);

  esp.begin(115200);

  esp.println("AT+CWMODE=3");

  delay(1000);

  esp.println("AT+CWJAP=\"BAYTONE\",\"av30162000\"");

  //esp.println("AT+CWJAP=\"POCO PHONE\",\"pras1234\"");

}

void loop()

{

  digitalWrite(fan,LOW);

  digitalWrite(signal2,LOW);

 digitalWrite(signal1,LOW);

    lcd.clear();

  sensorValue0 = analogRead(temp);

  temp = map(sensorValue0, 0, 1023, 0, 180);

  lcd.setCursor(0,0);

  lcd.print("HEAT = ");

  lcd.print(temp);

  humidity= temp\*1.1;

  delay(3000);

  sensorValue1 = analogRead(inhael);

  inhael = map(sensorValue1, 0, 1023, 0, 100);

  lcd.clear();

  lcd.print("AIR DENSITY=");

  delay(200);

  lcd.print(inhael);

   delay(3000);

   lcd.clear();

sensorValue2 = analogRead(wet);

  wet = map(sensorValue2, 0, 1023, 0,5);

  lcd.clear();

   lcd.print("WET HAPPND  ");

  digitalWrite(buzzer,HIGH);

  lcd.print(wet);

  //  lcd.print("C");

  delay(2000);

  digitalWrite(buzzer,LOW);

  esp.println("AT+CIPSTART=\"TCP\",\"184.106.153.149\",80");

  delay(5000);

  esp.println("AT+CIPSEND=105");

  delay(2000);

 // esp.print("GET https://api.thingspeak.com/update?api\_key=IFICBCVR5QLT812J&field1=0");//panimalar

  //GET https://api.thingspeak.com/update?api\_key=IFICBCVR5QLT812J&field1=0

  esp.print("GET https://api.thingspeak.com/update?api\_key=JTQSSQ5QR9FORLE0&field1=0");//bio

  esp.print(temp);//smoke

  esp.print("&field2=");

  esp.print(inhael);//pir

  esp.print("&field3=");

  esp.println(humidity);//temperature

  delay(3000);

  lcd.setCursor(0,0);

  lcd.print("                    "); a

  lcd.setCursor(0,1);

  lcd.print("                    ");

if (temp>=100)

{

lcd.clear();

  lcd.print("HEAT HIGH");

  digitalWrite(fan,HIGH);

  digitalWrite(buzzer,HIGH);

  //Serial.print("L1");

  lcd.setCursor(0,1);

  delay(100);

 digitalWrite(signal1,HIGH);

  digitalWrite(signal2,LOW);

 delay(5000);

 digitalWrite(signal2,LOW);

 digitalWrite(signal1,LOW);

 delay(2000);

 digitalWrite(signal2,HIGH);

 //delay(100);

 digitalWrite(signal1,LOW);

  delay(5000);

 digitalWrite(signal2,LOW);

 digitalWrite(signal1,LOW);

 delay(2000);

 digitalWrite(fan,LOW);

  //digitalWrite(fan,HIGH);

  digitalWrite(buzzer,LOW);

}

else

{

  lcd.print("HEAT LOW");

  //Serial.print("L1");

  lcd.setCursor(0,1);

  delay(100);

 digitalWrite(signal1,LOW);

 digitalWrite(fan,LOW);

 delay(1000);

 digitalWrite(signal2,LOW);

}

}