PYTHON

#include <SPI.h>

#include <Wire.h>

#include <Adafruit\_GFX.h>

#include <Adafruit\_SSD1306.h>

#define OLED\_RESET 4

Adafruit\_SSD1306 display(OLED\_RESET);

#define NUMFLAKES 10

#define XPOS 0

#define YPOS 1

#define DELTAY 2

#define LOGO16\_GLCD\_HEIGHT 16

#define LOGO16\_GLCD\_WIDTH 16

static const unsigned char PROGMEM logo16\_glcd\_bmp[] =

{ B00000000, B11000000,

B00000001, B11000000,

B00000001, B11000000,

B00000011, B11100000,

B11110011, B11100000,

B11111110, B11111000,

B01111110, B11111111,

B00110011, B10011111,

B00011111, B11111100,

B00001101, B01110000,

B00011011, B10100000,

B00111111, B11100000,

B00111111, B11110000,

B01111100, B11110000,

B01110000, B01110000,

B00000000, B00110000 };

#if (SSD1306\_LCDHEIGHT != 64)

#error("Height incorrect, please fix Adafruit\_SSD1306.h!");

#endif

void setup() {

pinMode(13,OUTPUT);

Serial.begin(9600);

display.begin(SSD1306\_SWITCHCAPVCC, 0x3C);

display.clearDisplay();

delay(2000);

}

void loop() {

display.setTextColor(WHITE);

displayT();

display.display();

delay(500);

display.clearDisplay();

}

void test1(void) // Function for showing the name

{

display.setTextSize(2);

display.setTextColor(WHITE);

display.setCursor(33,3);

display.println("IrriG");

}

void test2(void) //Function to show data of the first probe

{

display.setTextSize(1);

display.setTextColor(WHITE);

display.setCursor(10,25);

display.println("Moisture A :");

}

void test3(void) //Function to show data of second probe

{

display.setTextSize(1);

display.setTextColor(WHITE);

display.setCursor(10,35);

display.println("Moisture B :");

}

void Value1(void) // Function for observing the data

{

int p = analogRead(A0);

Serial.println(p); //Serial printing is done to archieve the data through python

int q = analogRead(A1);

display.setTextSize(1);

display.setTextColor(WHITE);

display.setCursor(95,25);

display.println(p);

display.display();

display.setCursor(95,35);

display.println(q);

display.display();

if(p>530){

digitalWrite(13,HIGH);

}

else{

digitalWrite(13,LOW);

}

}

void displayT(void) // Function to make the grapics for OLLED

{

for(int i=0;i<=128;i++){

display.drawPixel(i, 0, WHITE);

display.drawPixel(i, 63, WHITE);

display.drawPixel(i, 20, WHITE);

display.drawPixel(i, 46, WHITE);

}

for(int j=0;j<=63;j++){

display.drawPixel(0, j, WHITE);

display.drawPixel(127, j, WHITE);

}

test1();

test2();

test3();

Value1();

}