#define BLYNK\_TEMPLATE\_ID "Template ID"

#define BLYNK\_TEMPLATE\_NAME "Template ID"

#define BLYNK\_AUTH\_TOKEN "Auth Token"

#define BLYNK\_PRINT Serial

#include <ESP8266WiFi.h>

#include <BlynkSimpleEsp8266.h>

char auth[] = BLYNK\_AUTH\_TOKEN;

char ssid[] = "\*\*\*\*\*\*\*\*\*\*";

char pass[] = "\*\*\*\*\*\*\*\*\*\*";

BlynkTimer timer;

#define soil A0

#define waterPump D7

WidgetLED pump(V1);

float soilLevel, soilR;

WidgetLCD vLcd(V2);

void SMESensor()

{

readSoil();

if(soilLevel>=80)

{

digitalWrite(waterPump, LOW);

vLcd.print(0,0,"Water Pump OFF");

pump.off();

}

if(soilLevel<20)

{

digitalWrite(waterPump, HIGH);

vLcd.print(0,0, "Water Pump ON ");

pump.on();

}

}

void readSoil()

{

soilR=analogRead(soil);

Serial.println(soilR);

soilLevel=map(soilR, 0, 1024, 200,0); // adjust soil level here

Serial.println(soilLevel);

Blynk.virtualWrite(V0, soilLevel);

delay(1000);

}

void setup()

{

Serial.begin(9600);

pinMode(waterPump, OUTPUT);

digitalWrite(waterPump, LOW);

delay(100);

Blynk.begin(auth, ssid, pass);

delay(1000);

timer.setInterval(1000L, SMESensor);

}

void loop() {

Blynk.run();

timer.run();

}