#define BLYNK\_TEMPLATE\_ID "TMPLipn8xPYa"

#define BLYNK\_DEVICE\_NAME "IRRI"

#define BLYNK\_AUTH\_TOKEN "\_7cP-YUWMYcS5Lz5UDL3zn5j5tgsZrld"

#define BLYNK\_PRINT Serial

#define motor D0

#include <ESP8266WiFi.h>

#include <BlynkSimpleEsp8266.h>

char auth[] = BLYNK\_AUTH\_TOKEN;

char ssid[] = "Nayuu...!";

char pass[] = "bhikari2";

const int AirValue = 620; //you need to replace this value with Value\_1

const int WaterValue = 310; //you need to replace this value with Value\_2

int soilMoistureValue = 0;

int soilmoisturepercent=0;

int sensor = A0;

BlynkTimer timer;

void myTimerEvent()

{

Blynk.virtualWrite(V0,digitalRead(motor));

Blynk.virtualWrite(V1,soilmoisturepercent);

}

void setup()

{

Serial.begin(9600);

pinMode(motor,OUTPUT);

Blynk.begin(auth, ssid, pass);

timer.setInterval(1000L, myTimerEvent);

}

void loop() {

Blynk.run();

timer.run();

soilMoistureValue = analogRead(sensor); //put Sensor insert into soil

Serial.print("sensor value");

Serial.println(soilMoistureValue);

soilmoisturepercent = map(soilMoistureValue, AirValue, WaterValue, 0, 100);

if(soilmoisturepercent >= 100)

{

Serial.print("moisture is ");

Serial.println("100 %");

}

else if(soilmoisturepercent <=0)

{

Serial.print("moisture is ");

Serial.println("0 %");

}

else if(soilmoisturepercent >0 && soilmoisturepercent < 100)

{

Serial.print("moisture is ");

Serial.print(soilmoisturepercent);

Serial.println("%");

}

if(soilmoisturepercent <= 30)

{

digitalWrite(motor,HIGH);

Serial.println("MOTOR IS ONN");

}

if(soilmoisturepercent >= 80)

{

digitalWrite(motor,LOW);

Serial.println("MOTOR IS OFF");

}

delay(1000);

}