// wifi controlled home automation using Blynk App & ESP8266

#define BLYNK\_TEMPLATE\_ID "TMPL3FHTnz0NJ"

#define BLYNK\_TEMPLATE\_NAME "Node MCU"

#define BLYNK\_AUTH\_TOKEN "UoOA\_Q3HXB7PLgH9it1hpHKtpWu6O5ye"

#define BLYNK\_PRINT Serial

#include <gpio.h>

#include <ESP8266WiFi.h>

#include <BlynkSimpleEsp8266.h>

char auth[] = BLYNK\_AUTH\_TOKEN;

char ssid[] = "Airtel\_anish\_2075";

//"Cmf"; // Your Wifi Name

//"Airtel\_anish\_2075\_5G","Air@37616")

char pass[] = "Air@37616";

//"03101992"; // Your Wifi Password

//in the below code, we have set all values reverse

//For value==1, digitalWrite is "LOW" as the realy module is active "LOW" to turn device ON.

//For value==0, digitalWrite is "HIGH" as Optocoupler based relay is turned OFF when HIGH Input is given

BLYNK\_WRITE(V1)

{

int value = param.asInt();

Serial.println(value);

if(value == 1)

{

digitalWrite(D0, LOW);

Serial.println("LED ON"); //Setting Digital PIN as LOW to turn ON Device if relay module is "active low"

}

if(value == 0)

{

digitalWrite(D0, HIGH);

Serial.println("LED OFF");//Setting Digital PIN as HIGH to turn OFF Device if relay module is "active low"

}

}

BLYNK\_WRITE(V2)

{

int value = param.asInt();

Serial.println(value);

if(value == 1)

{

digitalWrite(D1, LOW);

Serial.println("LED ON");

}

if(value == 0)

{

digitalWrite(D1, HIGH);

Serial.println("LED OFF");

}

}

BLYNK\_WRITE(V3)

{

int value = param.asInt();

Serial.println(value);

if(value == 1)

{

digitalWrite(D2, LOW);

Serial.println("LED ON");

}

if(value == 0)

{

digitalWrite(D2, HIGH);

Serial.println("LED OFF");

}

}

BLYNK\_WRITE(V4)

{

int value = param.asInt();

Serial.println(value);

if(value == 1)

{

digitalWrite(D3, LOW);

Serial.println("LED ON");

}

if(value == 0)

{

digitalWrite(D3, HIGH);

Serial.println("LED OFF");

}

}

void setup()

{

Serial.begin(115200);

Blynk.begin(auth, ssid, pass);

pinMode(D0,OUTPUT); //GPIO 16 (equivalent to PIN 16 of Arduino)

pinMode(D1,OUTPUT); //GPIO 05 (equivalent to PIN 05 of Arduino)

pinMode(D2,OUTPUT);//GPIO 04 (equivalent to PIN 16 of Arduino)

pinMode(D3,OUTPUT);//GPIO 00 (equivalent to PIN 00 of Arduino)

}

void loop()

{

Blynk.run();

}