**SMART PLANT MONITORING SYSTEM**

#define BLYNK\_PRINT Serial

#include <ESP8266WiFi.h>

#include <BlynkSimpleEsp8266.h>

char auth[] = "8zmiDsSIwnxq9sC3kehsUMFUpojOELJ4";

char ssid[] = "Saksham";

char pass[] = "Saksh123";

BlynkTimer timer;

bool Relay = 0;

#define sensor A0

#define waterPump D0

void setup() {

Serial.begin(9600);

pinMode(waterPump, OUTPUT);

digitalWrite(waterPump, HIGH);

Blynk.begin(auth, ssid, pass, "blynk.cloud", 80);

timer.setInterval(100L, soilMoistureSensor);

}

BLYNK\_WRITE(V1) {

Relay = param.asInt();

if (Relay == 1) {

digitalWrite(waterPump, LOW);

} else {

digitalWrite(waterPump, HIGH);

}

}

void soilMoistureSensor() {

int value = analogRead(sensor);

value = map(value, 0, 1024, 0, 100);

value = (value - 100) \* -1;

Blynk.virtualWrite(V0, value);

}

void loop() {

Blynk.run();//Run the Blynk library

timer.run();//Run the Blynk timer

}