

```
#include <Arduino.h>

#include <Wire.h>
#include <ESP8266_Lib.h>
#include <BlynkSimpleShieldEsp8266.h>
#include <SoftwareSerial.h>
void receiveEvent(int bytes);
void updateGPS();
void loadValues();

const int ARDUINO_SLAVE_ADDRESS = 9;
String message; //message from master arduino

float longitude=0, latitude=0, last_longitude=0, last_latitude=0; //gps data
int gps_iteration=0; //gps amount of values

//initializing wifi module and blynk
SoftwareSerial EspSerial(0, 1);
ESP8266 wifi(&EspSerial);
char auth[] = "qQ44jhXFFvGH1B80t5cXB0y3ojHFDw-M";
char ssid[] = "igoriphone";
char pass[] = "bbbbbbbbb";
//////////

void receiveEvent(int bytes) {
  while(Wire.available()) {
    message+=String(Wire.read());
  }
}

void updateGPS() {
  if(latitude!=(float)0 && latitude!=last_latitude && longitude!=last_longitude) {
    Blynk.virtualWrite(V28, gps_iteration, latitude, longitude, String
      (gps_iteration));
    last_latitude = latitude;
    last_longitude = longitude;
    gps_iteration++;
  }
}

void loadValues() {
  if(message=="lon") {
    message="";
    while(message!="");
    longitude = message.toFloat();
  } else if(message=="lat") {
    message="";
    while(message!="");
    latitude = message.toFloat();
  }
}
```

```
void setup() {  
    EspSerial.begin(9600);  
    delay(10);  
    Blynk.begin(auth, wifi, ssid, pass);  
}  
  
boolean first = true;  
  
void loop() {  
    Blynk.run();  
  
    if(first) {  
        Wire.begin(ARDUINO_SLAVE_ADDRESS);  
        Wire.onReceive(receiveEvent);  
        first=false;  
    }  
    loadValues();  
    updateGPS();  
}
```