#include <SoftwareSerial.h>

#include <TinyGPS.h>

#include <GSM.h>.

#define PINNUMBER ""

// initialize the library instance

GSM gsmAccess;

GSM\_SMS sms;

char latt[15];

char longg[15]; // create variable for latitude and longitude object

long lat,lon;

SoftwareSerial gpsSerial(2, 3); // create gps sensor connection

TinyGPS gps; // create gps object

void setup(){

Serial.begin(9600); // connect serial

gpsSerial.begin(9600); // connect gps sensor

while (!Serial) {

; // wait for serial port to connect. Needed for native USB port only

}

Serial.println("SMS Messages Sender");

// connection state

boolean notConnected = true;

// Start GSM shield

// If your SIM has PIN, pass it as a parameter of begin() in quotes

while (notConnected) {

if (gsmAccess.begin(PINNUMBER) == GSM\_READY) {

notConnected = false;

} else {

Serial.println("Not connected");

delay(1000);

}

}

Serial.println("GSM initialized");

}

void loop(){

while(gpsSerial.available()){ // check for gps data

if(gps.encode(gpsSerial.read())){ // encode gps data

gps.get\_position(&lat,&lon); // get latitude and longitude

// display position

Serial.print("Position: ");

Serial.print("lat: ");Serial.print(lat);Serial.print(" ");// print latitude

Serial.print("lon: ");Serial.println(lon); // print longitude

Serial.print("Enter a mobile number: ");

char remoteNum[20]; // telephone number to send sms

readSerial(remoteNum);

Serial.println(remoteNum);

// sms text

itoa(lat,latt,10);

itoa(lon,longg,10);

readSerial(latt);

readSerial(longg);

Serial.println("SENDING");

Serial.println();

Serial.println("Message:");

Serial.println(latt);

Serial.println(longg);

// send the message

sms.beginSMS(remoteNum);

sms.print(lat);

sms.print(lon);

sms.endSMS();

Serial.println("\nCOMPLETE!\n");

}

}

}

int readSerial(char result[]) {

int i = 0;

while (1) {

while (Serial.available() > 0) {

char inChar = Serial.read();

if (inChar == '\n') {

result[i] = '\0';

Serial.flush();

return 0;

}

if (inChar != '\r') {

result[i] = inChar;

i++;

}

}

}

}