

```

#include <Wire.h>
#include <LiquidCrystal_I2C.h>

// Set the LCD address to 0x27 for a 16 chars and 2 line display
LiquidCrystal_I2C lcd(0x3f, 16, 2);

#include <TinyGPS++.h>
TinyGPSPPlus gps;

int tempPin=35;
float latt;
float longi;

int sensor_value,bp1=0;
int tempdata;
int cel;
int celcius;
int sw1=2;
int sw2=14;
int val;

////////////////////
#include "ThingSpeak.h"
#include "secrets.h"
#include <WiFi.h>

char ssid[] = "Ramya's iPhone"; // your network SSID (name)
char pass[] = "dan03123"; // your network password
int keyIndex = 0; // your network key Index number (needed only for WEP)
WiFiClient client;

unsigned long myChannelNumber = 1069052;
const char * myWriteAPIKey = "JRYCNL54FNNAPRTE";

// Initialize our values

String myStatus = "";

void setup(void)
{
  Serial.begin(9600);
  Serial2.begin(9600);
  lcd.begin();
  pinMode(sw1,INPUT);

```

```

pinMode(sw2,INPUT);
// Start up the library

Serial.println(F("DeviceExample.ino"));
Serial.println(F("A simple demonstration of TinyGPS++ with an attached GPS module"));
Serial.print(F("Testing TinyGPS++ library v. "));
Serial.println(TinyGPSPlus::libraryVersion());
Serial.println(F("by Mikal Hart"));
Serial.println();

WiFi.mode(WIFI_STA);
ThingSpeak.begin(client); // Initialize ThingSpeak

}

void loop(void)
{
  if(WiFi.status() != WL_CONNECTED){
    Serial.print("Attempting to connect to SSID: ");
    Serial.println(SECRET_SSID);
    while(WiFi.status() != WL_CONNECTED){
      WiFi.begin(ssid, pass); // Connect to WPA/WPA2 network. Change this line if using
open or WEP network
      Serial.print(".");
      lcd.setCursor(0, 0);
      lcd.print("connecting..");
      delay(5000);
    }
    Serial.println("\nConnected.");
  }

  for(int z=0;z<100;z++)
  {
    tempdata = analogRead(tempPin);
    Serial.print("adc=");
    Serial.println(tempdata);
    float mv = (tempdata/4096.0)*3700;
    Serial.print("MV=");
    Serial.println(mv);
    cel = mv/10;
    celcius=celcius+cel;
  }
  celcius=celcius/100;

```

```

for(int i=0;i<100;i++)
{

    sensor_value = analogRead(34);
float bp = (sensor_value/120)*3.3;
    bp1=bp1+bp;
}
bp1=bp1/100;
Serial.print("temp=");
    Serial.println(celcius);
    Serial.print("BPM=");
    Serial.println(bp1);
    lcd.setCursor(0, 0);
    lcd.print("T:");
    lcd.print(celcius);
    lcd.print(" ");
delay(2000);
    lcd.print("BPM:");
    lcd.print(bp1);
    lcd.print(" ");
loc();
if(digitalRead(sw1)==LOW)
{
send_sms();
}

```

```

ThingSpeak.setField(1, latt);
ThingSpeak.setField(2, longi);
ThingSpeak.setField(3, bp1);
ThingSpeak.setField(4, celcius);

```

```

// write to the ThingSpeak channel
int x = ThingSpeak.writeFields(myChannelNumber, myWriteAPIKey);
if(x == 200){
    Serial.println("Channel update successful.");
}
else{
    Serial.println("Problem updating channel. HTTP error code " + String(x));
}

```

```

// change the values

```

```
ThingSpeak.writeFields(myChannelNumber, myWriteAPIKey);  
//delay(20000); // Wait 20 seconds to update the channel again  
// accident="";
```

```
}
```

```
////////////////////////////////////
```

```
////////////////////////////////////
```

```
void send_sms()
```

```
{
```

```
  lcd.setCursor(0,0);
```

```
  // lcd.print("sending sms..");
```

```
  // put your main code here, to run repeatedly:
```

```
  Serial.print("AT=1\r");
```

```
  delay(100);
```

```
  Serial.print("AT+CMGF=1\r");
```

```
  delay(100);
```

```
    Serial.print("AT+CMGS=\"+919844977066\"\r");
```

```
  delay(100);
```

```
  Serial.println("CHILD IS IN PROBLEM AT THE LOCATION=");
```

```
  Serial.println("https://earth.google.com/web/search/");
```

```
  Serial.print(latt);
```

```
  Serial.print(",");
```

```
  Serial.print(longi);
```

```
  Serial.println("/");
```

```
    delay(100);
```

```
  Serial.write(0x1A);
```

```
  delay(2000);
```

```
    Serial.write(0x1A);
```

```
  delay(2000);
```

```
  Serial.write(0x1A);
```

```
  delay(2000);
```

```
// accident="accident occurred";
```

```
////////////////////////////////////
```

```
Serial2.print("AT=1\r");
```

```
  delay(100);
```

```
  Serial2.print("AT+CMGF=1\r");
```

```
  delay(100);
```

```
    Serial2.print("AT+CMGS=\"+919844977066\"\r");
```

```

delay(100);
Serial2.print("CHILD IS IN PROBLEM AT THE LOCATION=");
Serial2.println("https://earth.google.com/web/search/");
Serial2.print(latt);
Serial2.print(",");
Serial2.print(longi);
Serial2.println("/");
    delay(100);
Serial2.write(0x1A);
delay(2000);
    Serial2.write(0x1A);
delay(2000);
Serial2.write(0x1A);
delay(2000);

    lcd.setCursor(0,0);
    lcd.print("msg sent....");
    //////////////////////////////////////

}

////////////////////////////////////
void loc()
{
    // This sketch displays information every time a new sentence is correctly encoded.
    while (Serial2.available() > 0)
        if (gps.encode(Serial2.read()))
            displayInfo();

    if (millis() > 5000 && gps.charsProcessed() < 10)
    {
        Serial.println(F("No GPS detected: check wiring."));
        while(true);
    }
}

void displayInfo()
{
    Serial.print(F("Location: "));
    if (gps.location.isValid())
    {
        Serial.print(gps.location.lat(), 7);
        Serial.print(F(", "));
        Serial.print(gps.location.lng(), 7);
        latt=(gps.location.lat(), 7);
        longi=(gps.location.lng(), 7);
    }
}

```

```

    lcd.setCursor(0,1);
    lcd.print(gps.location.lat(),4);
    lcd.setCursor(6,1);
    lcd.print(" ");
    lcd.setCursor(8,1);
    lcd.print(gps.location.lng(),4);
}
else
{
    Serial.print(F("INVALID"));
}

Serial.print(F(" Date/Time: "));
if (gps.date.isValid())
{
    Serial.print(gps.date.month());
    Serial.print(F("/"));
    Serial.print(gps.date.day());
    Serial.print(F("/"));
    Serial.print(gps.date.year());
}
else
{
    Serial.print(F("INVALID"));
}

Serial.print(F(" "));
if (gps.time.isValid())
{
    if (gps.time.hour() < 10) Serial.print(F("0"));
    Serial.print(gps.time.hour());
    Serial.print(F(":"));
    if (gps.time.minute() < 10) Serial.print(F("0"));
    Serial.print(gps.time.minute());
    Serial.print(F(":"));
    if (gps.time.second() < 10) Serial.print(F("0"));
    Serial.print(gps.time.second());
    Serial.print(F("."));
    if (gps.time.centisecond() < 10) Serial.print(F("0"));
    Serial.print(gps.time.centisecond());
}
else
{
    Serial.print(F("INVALID"));
}

```

```
Serial.println();  
}
```