Mini Project Software Code

#include<SoftwareSerial.h>  
#include <TinyGPS.h>  
  
float lat = 13.0827, lon = 80.2707; // create variable for latitude and longitude object    
  
SoftwareSerial gpsSerial(6, 5);//rx,tx  
TinyGPS gps; // create gps object  
  
String latitude;  
String longitude;  
  
#define pushbutton 2  
  
#define buzzer 13  
  
int SoundSensor1 = 12;  
int SoundState1;  
  
void message1(void);  
void message2(void);  
  
void setup()  
{  
  Serial.begin(9600);  
   
  gpsSerial.begin(9600);  
  
  pinMode(pushbutton, INPUT\_PULLUP);  
  
  pinMode(SoundSensor1, INPUT);  
  
  pinMode(buzzer, OUTPUT);  
    digitalWrite(buzzer, LOW);  
}  
  
void loop()  
{  
  if((digitalRead(pushbutton) == LOW) || (digitalRead(SoundSensor1) == 0))  
  {  
    latitude = 13.0827;  
    longitude = 80.2707;  
     
    Serial.println("Safety Alert");  
  
    digitalWrite(buzzer, HIGH);  
     
    delay(100);  
    message1();  
    Serial.println("Safety Alert Message 1 Sent");    
    delay(100);  
  
    delay(100);  
    message2();  
    Serial.println("Safety Alert Message 2 Sent");    
    delay(100);  
     
    digitalWrite(buzzer, LOW);  
     
    Serial.println("         ");    
       
     
    while(gpsSerial.available())  
    { // check for gps data  
      if(gps.encode(gpsSerial.read()))// encode gps data  
      {    
      gps.f\_get\_position(&lat,&lon); // get latitude and longitude  
      Serial.print("Position: ");  
      Serial.print("Latitude:");  
      Serial.print(lat,6);  
      Serial.print(";");  
      Serial.print("Longitude:");  
      Serial.println(lon,6);  
      String latitude = String(lat,6);  
      String longitude = String(lon,6);  
      Serial.println(latitude+";"+longitude);  
      delay(500);  
      }  
    }  
   
    Serial.println("\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*");  
    Serial.println("         ");  
    delay(5000);  // Interval 30 seconds = 30\*1000 // Interval 60 sec = 60\*1000  
  }  
}  
  
void message1(void)  
{  
  Serial.print("AT\r\n");delay(800);  
  Serial.print("AT+CMGF=1\r\n");delay(800);  
  Serial.print("AT+CMGS=");delay(500);  
  Serial.write('"');delay(500);  
  Serial.print("9940033064");delay(500);//Change the calling number  
  Serial.write('"');  
  Serial.print("\r\n");delay(500);  
  Serial.print("'Safety Alert'\r\n <http://maps.google.com/maps?q=loc>:"+latitude+","+longitude);delay(500);//17  
  delay(500);  
  Serial.write((char)26);  
}  
  
void message2(void)  
{  
  Serial.print("AT\r\n");delay(800);  
  Serial.print("AT+CMGF=1\r\n");delay(800);  
  Serial.print("AT+CMGS=");delay(500);  
  Serial.write('"');delay(500);  
  Serial.print("9952243782");delay(500);//Change the calling number  
  Serial.write('"');  
  Serial.print("\r\n");delay(500);  
  Serial.print("'Safety Alert'\r\n <http://maps.google.com/maps?q=loc>:"+latitude+","+longitude);delay(500);//17  
  delay(500);  
  Serial.write((char)26);  
}